No. 2. — Zoological Results of a Fifth Expedition to East Africa

H

Birds from Nyasaland and Tete
By J. L. Peters¹ and A. Loveridge

CONTENTS

	PAGE
Introduction and Acknowledgements	. 87
Index to Families	. 91
Systematic List of Species Collected	. 92
Bibliography	. 139

INTRODUCTION and ACKNOWLEDGEMENTS

In recent years the avifauna of Nyasaland has been studied so efficiently by Messrs. C. W. Benson and Jack Vincent that the junior author directed his efforts chiefly to other groups of vertebrates, the primary purpose of the expedition being an investigation of Nyasaland's poikilothermous montane fauna. The enquiry was financed by the Penrose Fund of the American Philosophical Society and a grant from the Museum of Comparative Zoology, on whose behalf it was carried out.

A synopsis of the itinerary is supplied in the caption accompanying Plate 1—a map showing the position of the principal collecting localities. Altitudes, latitudes, longitudes and other information regarding the various camps will be furnished in the final report of this series which will deal with the general conclusions. All localities mentioned in the present paper are situated in Nyasaland except Tete, which is in Mozambique (= M).

In the case of camps that were situated in type localities, a special effort was made to secure topotypic material. Altogether topotypes of 27 different kinds of birds were preserved. Ten of these were from

Five days after the identification of this collection had been completed, the senior author was suddenly stricken with the heart attack that led to his death on April 19, 1952. Not only will J. L. Peters be missed and mourned by his immediate colleagues and associates, but by that much wider circle of ornithologists who have come to rely on his monumental CHECK-LIST OF BIRDS OF THE WORLD which all will regret he was not spared to complete.

the Nyika Plateau where, through the generosity of Mr. C. W. Benson, the junior author had the services of his trained bird collector, Jali Makawa. Elsewhere, Loveridge did his own collecting. Altogether 510 skins, representing 203 species or races of birds, were obtained between August 1, 1948 and April 8, 1949.

Already Benson (1951, pp. 69-114) has reported on most of the nests and eggs, principally found on the Nyika by Jali Makawa. Some additional observations on nesting and breeding, together with notes on prey, parasites, etc. will be found in the following pages, together with many native names in use among the various tribes.

When the work of identification was concluded the junior author turned the manuscript over to Peters, who remarked that there would be some minor adjusting to be done before it could be typed. Just how much he contemplated will never be known. However, it had been mutually agreed already that the typescript should be submitted to Dr. J. P. Chapin and C. W. Benson for the benefit of their expert knowledge.

Half-a-dozen lots of birds whose subspecific identity appeared uncertain to the senior author, had been set aside for submission to Chapin, whose comments on their status have been included in this report. With characteristic thoroughness Dr. Chapin has also read the typescript and proposed a number of minor corrections. For his invaluable help we are more than grateful.

The typescript was then submitted to Mr. C. W. Benson, whose familiarity with Nyasaland birds is unequalled. He, also, went to considerable trouble, going over our findings and adjusting a number of subspecific identifications for which we wish to express our heartfelt thanks. He suggests that the locality "Nyika Plateau" is used rather loosely and that the undermentioned sylvicoline species:

Turacus schalowi marungensis Pogoniulus leucomystax Phyllastrephus flavostriatus alfredi Scicercus ruficapillus johnstoni Linurgus olivaceus rungwensis

were probably shot on the forested escarpment about 6000 feet, rather than on the grass-grown plateau itself at 7500 feet. Actually, however, some at least were taken in a forested gully that ran right up to the plateau in the vicinity of our camp, which was at 7500 feet. Unquestionably the birds formed a part of the original forest fauna.

The junior author takes this opportunity to thank his colleague J. C. Greenway for help in checking certain racial characters of forms whose identity was questioned by our correspondents; also for his generosity in lending the double-barreled shotgun with which all the larger birds were procured.

In the following discussion the families, genera and species of the non-passerines are in the order of Peters' Check-list, the passerine families as in the report on the birds of the fourth expedition (Peters and Loveridge, 1942, Bull. Mus. Comp. Zool., 89, pp. 217–275); that is to say, within the families, both genera and species are substantially

in the order adopted by Sclater in his Systema.

The senior author objected to citations and type localities being taken direct from Sclater and would doubtless have checked them as he did for our previous joint papers. Circumstances resulted in this being undertaken by the junior author who has verified all but 2 of the 118 references to ornithological journals, and most of those taken from volumes where the citations were not already covered by Peters Check-list. Sclater frequently omitted altitudes of type localities and these have been restored except in the case of Whyte's overestimate of 7000 feet for his camp in the "Masuka Range." These mountains appear as Misuku in recent Nyasaland government publications, and the resident Misuku tribesmen assured me that Misuku, rather than Masuku, is the correct rendering.



INDEX TO FAMILIES

	Page		Page
ACCIPITRIDAE	94	NUMIDIDAE	. 96
ALAUDIDAE	109	ORIOLIDAE	. 111
ALCEDINIDAE	104	PHALACROCORACIDA	E 92
ANHINGIDAE	92	PHASIANIDAE	. 96
ARDEIDAE	92	PHOENICULIDAE	. 106
BUCEROTIDAE	107	PICIDAE	. 108
CAPITONIDAE	107	PLOCEIDAE	. 132
CAPRIMULGIDAE	103	PRIONOPIDAE	. 128
COLUMBIDAE	99	PSITTACIDAE	. 99
CORACIIDAE	106	PYCNONOTIDAE	. 112
CUCULIDAE	101	RALLIDAE	. 97
DICRURIDAE	111	SCOLOPACIDAE	. 98
EMBERIZIDAE	138	SCOPIDAE	. 93
FRINGILLIDAE	137	STERNIDAE	. 99
GLAREOLIDAE	98	STRIGIDAE	. 102
HIRUNDINIDAE	109	STURNIDAE	. 128
INDICATORIDAE	108	SYLVIIDAE	. 117
JACANIDAE	98	THRESKIORNITHIDAE	E 93
LANIIDAE	126	TIMALIIDAE	. 111
MEROPIDAE	105	TROGONIDAE	. 104
MOTACILLIDAE	124	TURDIDAE	. 114
MUSCICAPIDAE	121	TYTONIDAE	. 101
MUSOPHAGIDAE	100	UPUPIDAE	. 106
NECTARINIIDAE	129	ZOSTEROPIDAE	132

SYSTEMATIC LIST OF SPECIES COLLECTED PHALACROCORACIDAE

Phalacrocorax carbo lucidus> < lugubris

o (M.C.Z. 278633) Mtimbuka.17.ii.49.

The White-breasted Cormorants of Nyasaland, as stated by Mackworth-Praed and Grant (1933, Ibis, pp. 746-7), are intermediate between *lucidus* (Lichtenstein), 1823, of the Cape, and *lugubris* Rüppell, 1845, of Ethiopia.

PHALACROCORAX AFRICANUS AFRICANUS (Gmelin)

Pelecanus africanus Gmelin, 1789, Syst. Nat., 1, pt. 2, p. 577: Africa.

1 (M.C.Z. 278634) Mnema, Lake Nyasa. 16.xii.48. 6 & & , 6 $\,$ $\,$ $\,$ $\,$ (M.C.Z. 278635–6) Mtimbuka. 17 & 24.ii.49.

The series from Mtimbuka were shot primarily for the pot, at the request of my skinners who were possibly influenced by the prevailing food shortage resulting from the failure of the rains.

"On rising at Chipoka, much to my surprise, as I had never before seen such a concentration, about two hundred Long-tailed Cormorants were quietly swimming, actively diving, or, periodically flying low over the water to get ahead of a shoal of fish that were about thirty yards from my door on the lakeshore." (From diary of 3.ii.49).

ANHINGIDAE Anhinga rufa rufa (Daudin)

Plotus rufus Daudin, 1802, Buffon Hist. Nat., ed. Didot, Quadr., 14, p. 319: Senegal.

1 ♂, 3 ♀ ♀ (M.C.Z. 278647–50) Mtimbuka. 17–24.ii.49.

A fifth, shot while sitting on the summit of the tall bole of a drowned Hyphaene palm standing far out in the lake, was lost when it toppled into the hollow interior of the trunk.

ARDEIDAE

BUTORIDES STRIATUS ATRICAPILLUS (Afzelius)

Ardea atricapilla Afzelius, 1804 (1805), Kongl. Vet. Acad. Nya Handl. (Stockholm), 25, p. 264: Sierra Leone.

1 ♂, 3 ♀ ♀ (M.C.Z. 278651-4) Mtimbuka. 22.ii.49. Native name, Kachamba (Yao).

Ardeola ralloides ralloides (Scopoli)

Ardea ralloides Scopoli, 1769, Annus. 1, Hist. Nat., p. 88: "In Carniolica" = Krain.

 $1 \, \varnothing$, $2 \, \circ \, \circ$ (M.C.Z. 278655-7) Mtimbuka. 22-24.ii.49.

Bubulculus ibis ibis (Linné)

Ardea Ibis Linné, 1758, Syst. Nat., ed. 10, 1, p. 144: Egypt.

♂ ♀ (M.C.Z. 278658-9) Mtimbuka. 10.ii.49.

Diet. The stomach of one Cattle Egret held grasshoppers and beetles, that of the other, insects — mostly beetles — much broken up.

Egretta garzetta garzetta (Linné)

Ardea Garzetta Linné, 1766, Syst. Nat., ed. 12, 1, p. 237: "Oriente" ex. Brisson.

♂ (M.C.Z. 278660) Mtimbuka. 8.ii.49.

Diet. This Little Egret's stomach held two small green fish (Haplochromis callipterus), called dondolo by the local Yao.

Parasites. A hippoboscid fly (Lynchia albipennis) and nematode were preserved.

SCOPIDAE

SCOPUS UMBRETTA BANNERMANNI Grant

Scopus umbretta bannermanni C. H. B. Grant, 1914, Bull. Brit. Orn. Club., 35, p. 27: Mt. Leganisho, 6600 ft., Kenya Colony.

o (M.C.Z. 267661) Mtimbuka. 18.ii.49.

♂ (M.C.Z. 267662) near Tete, M. 25.i.49.

Native name. Nshengwe (Nyungwe).

Dict. Eight frogs (Xenopus mülleri) were in the gullet and stomach of one Hammer-head Stork when shot at 9 A.M.; fish in the Nyasa bird.

THRESKIORNITHIDAE

THRESKIORNIS AETHIOPICA AETHIOPICA (Latham)

Tantalus aethiopicus Latham, 1790, Ind. Orn., 2, p. 706: "Aethiopia" = Egypt?

♂ (M.C.Z. 278663) near Tete, M. 10.i.49.

Native name. Kidiadzomba (Nyungwe).

Though this Sacred Ibis was shot in the early morning and hung in a cool place, four hours later when I reached camp it was smelling abominably. This is a good indication of the difficulties encountered at Tete where a temperature of 100° in the shade was an almost daily occurrence.

ACCIPITRIDAE

Aviceda cuculoides verreauxi Lafresnaye

Aviceda Verreauxii Lafresnaye, 1846, Revue Zoöl., p. 130: "Port Natal," i.e. Durban, Natal.

♂ (M.C.Z. 278664) Likabula River. 1.viii.48.

Diet. Large migratory locust and many grasshoppers in the stomach of this Cuckoo-Falcon which was perched in the same tree as a hornbill (Tockus p. neumanni). A second falcon was seen among the palms on the lakeshore near Mtimbuka.

Milvus migrans parasitus (Daudin)

Falco parasitus Daudin, 1800, Traité d'Orn., 2, p. 150: South Africa ex. Levaillant.

♂ (M.C.Z. 278665) Misuku Mtns. 22–30.ix.48.

Breeding. Testes very large.

Diet. Grasshopper in stomach.

Parasites. Two lice preserved.

Habits. At low water I went far out on the reef until forced to beat a hasty retreat before the swirling currents of an incoming tide that moved so swiftly there was a risk of being trapped. To my right on each of a dozen posts, possibly marking a deeper channel, was perched a kite with feathers ruffling in the strong breeze. As in turn each post was threatened with submergence by the rising water, the birds adjourned to the seashore where they settled on the sandy beach. Then one rose with the hairy husk of a coconut, another gave chase until it was dropped. In quick succession it was picked up by three different kites which swooped to seize it, only to be dropped again when the bird was closely pursued by its companions. The entire affair had very much the appearance of a game. (Dar es Salaam, 12.vii.48).

As July 12 would be much too early for Paleoarctic migrants (m. migrans) and the validity of m. tenebrosus is questionable, Chapin (note of 29.v.52) concurs with the junior author's sight allocation of these birds.

ACCIPITER BADIUS POLYZONOIDES Smith

Accipiter polyzonoides A. Smith, 1838, Ill. Zool. S. Afr. Aves, pl. xi: South Africa north of lat. 26° S. = Mafeking, Transvaal.

♀ (M.C.Z. 278666) near Tete, M. 11.i.49.

Native name. Kafumpe (Nyungwe, but not specific).

Stomach empty at 11 A.M., and gonads undeveloped.

Melierax gabar (Daudin)

Falco gabar Daudin, 1800, Traité d'Orn., 2, p. 87: Interior of South Africa ex. Levaillant.

Q (M.C.Z. 278668) Mtimbuka. 23.ii.49.

♂ (M.C.Z. 278667) near Tete, M. S.i.49.

Native name. Kafumpe (Nyungwe, but not specific); katotola (Yao). Diet. Chicken legs in stomach of the of Gabar Goshawk when shot from a baobab just before sunset; bird remains in the melanistic 9. Parasite. A hippoboscid fly escaped.

Haliaeetus vocifer vocifer (Daudin)

Falco vocifer Daudin, 1800, Traité d'Orn., 2, p. 65: Keurboom River, Cape Province.

♂ ♀ (M.C.Z. 278669-70) Mtimbuka. 7 & 17.ii.49.

Brehm's race clamans is untenable according to Mackworth-Praed and Grant (1934, Ibis, p. 832).

Dict. Fish in stomachs.

Parasites. Two hippoboscids (Lynchia dukci) were present on one of these Sea-Eagles.

Necrosyrtes monachus pileatus (Burchell)

Vultur pileatus Burchell, 1824, Travels, 2, p. 195, note: Hopetown District, Cape Province.

9 (M.C.Z. 278671) Mtimbuka. 14.ii.49. Parasites. A louse preserved (pinned dry).

CIRCUS MACROURUS (Gmelin)

Accipiter macrourus S. G. Gmelin, 1770 (1771), Nov. Comm. Acad. Petrop., 15, p. 439, pls. viii-ix: Voronezh, Southern Russia.

9 (M.C.Z. 278672) Nvika Plateau. 17.xi.48.

Diet. A swamp rat (Otomys kempi) and skink (Mabuya sp. nov.) in its stomach.

Polyboroides typus typus (Smith)

Polyboroides typus A. Smith, 1829, S. African Commercial Advertiser: Eastern Cape Province.

Poloboroides (sic) typicus A. Smith, 1830, S. Afr. Quart. Journ. (1), p. 107: Eastern Cape Province.

In the waters of Lake Nyasa just south of Mtimbuka, groups of crownless Hyphaene palms — looking like the pillars of some ancient temple — provide tangible evidence of the rise in lake level. The trunks of these drowned palms, now riddled with woodpecker holes, provide apparently ideal nesting sites for kingfishers and swallows. Intent on extracting the nestlings was a Harrier-Hawk which, with rapidly flapping wings, was clambering up the trunk of one palm a hundred yards off shore (Mtimbuka, 21.ii.49).

PHASIANIDAE

Francolinus sephaena zambesiae Praed

Francolinus sephaena zambesiae Praed, 1920, Bull. Brit. Orn. Club, 40, p. 140: Mesanangue, 70 miles above Tete, Zambezi River.

 $\begin{tabular}{ll} \emptyset (M.C.Z. 278573) near Tete, M. 10.i.49. \\ Native name. Nkwali (Nyungwe). \end{tabular}$

Francolinus Levaillanti Crawshayi Ogilvie-Grant

Francolinus crawshayi Ogilvie-Grant, 1896, Ibis, p. 482, pl. xii: "Cheni-cheni" i.e. Nchenachena Mtn., 7400 feet, Nyika Plateau, Nyasaland.

2 & 0, 2 & 0 (M.C.Z. 278574–7) Nyika Plateau. 30.x–17.xi.48. Breeding. On November 5, testes large.

Pternistes afer intercedens Reichenow

Pternistes cranchi intercedens Reichenow, 1909, Orn. Monatsb., 17, p. 88: Lake Rukwa and base of Livingstone Mtns. on Lake Nyasa.

3 ♂♂, 1 ♀ (M.C.Z. 278578-81) Nchenachena. 22.xi.48.

Two well-spurred adult $\nearrow \nearrow$ have the feathers of the abdomen and flanks with their white central portion reduced in area and the narrow shaft stripes broadly edged with chestnut. The other two, presumably immature, have the pale central portion wider, broader shaft stripes, and much narrower edging.

COTURNIX COTURNIX AFRICANA Temminck & Schlegel

Coturnix vulgaris africana Temminek & Schlegel, in Siebold, 1849, Fauna Jap., Aves, p. 103, in text: South Africa.

♀ (M.C.Z. 278582) Nyika Plateau. 1.xi.48.

NUMIDIDAE

Numida meleagris mitrata Pallas

Numida mitrata Pallas, 1767, Spic. Zool., **1**, fasc. 4, p. 18, pl. iii: Madagascar. 3 ♀♀ (M.C.Z. 278583-5) near Tete, M. 10-27.i.49.

Native name. Kanga (pl. zingkanga: Nyungwe).

Breeding. Apparently not, for on January 13 several flocks were seen and only one pair during the entire week. These observations may reflect the abnormally dry conditions prevailing during January, 1949, for Benson informs us that in Nyasaland — where the breeding season for guinea fowl is particularly well-defined — egg-laying is confined to the period from December to March.

RALLIDAE

Limnocorax flavirostra (Swainson)

Gallinula flavirostra Swainson, 1837, Bds. W. Afr., 2, p. 244, pl. xxviii: Senegal.

3 ♂♂, 2 ♀♀ (M.C.Z. 278586–90) Mtimbuka. 7.ii.49.

Native name. Ngurugusi or ngurukusi (Yao).

Two exhibit traces of juvenile plumage.

Porzana porzana (Linné)

Rallus Porzana Linné, 1766, Syst. Nat., ed. 12, **1**, p. 262; Europe = France.

♂ (M.C.Z. 278591) near Tete, M. 27.i.49.

PORPHYRULA ALLENI (Thomson)

Porphyrio Alleni Thomson, 1842, Ann. Mag. Nat. Hist., 10, p. 204: "Idda," i.e. Idah, Niger River, Southern Nigeria.

♂ ♀ (M.C.Z. 278594-5) Mtimbuka. 7.ii.49.

♂ ♀ (M.C.Z. 278592-3) near Tete, M. 10.i.49.

Native name. Vilizini (Nyungwe); wititi (Yao).

Sarothrura lineata antonii Madarasz & Neumann

Sarothrura antonii Madarasz & Neumann, 1911, Orn. Monatsb., 19, p. 186: Ndassekera, near Shirati, Tanganyika Territory.

♀ (M.C.Z. 278673) Lichenya Plateau. 10.viii.48.

This determination has been confirmed by Dr. J. P. Chapin, who writes: "I have no doubt that it is an adult female of Sarothrura lineata antonii. We have no specimen of that race here, and only one poor male of the nominate form from South Africa. It surprised me a little that a female should have so much rufous about the head and neck. Mackworth-Praed & Grant (1937, Ibis, pp. 627-628) do not mention that, but in S. lugens $\mathfrak P$ there is a good deal of rufous on the head too. The fact that this rufous extends so far down on the foreneck seems to prove that your bird is really antonii. I have seen males

from Mt. Kenya, and this greater extent of rufous is one of the main racial characters of *antonii*. The short toes and the presence of rufous on the tail prove the species is *S. lineata*. Congratulations to you on having this rare bird in the M.C.Z."

We note that Belcher (1930, p. 67) "put up a small rail on Mlanje Plateau early in November 1924, which" he thought was referable to lineata; "it was in tussocky grass not far from the forest edge near the Boma Cottage." Consequently within a mile or so of where this specimen was snared.

JACANIDAE

ACTOPHILORNIS AFRICANA (Gmelin)

Parra africana Gmelin, 1789, Syst. Nat., 1, pt. 2, p. 709; Africa; restricted to Ethiopia by Grant, 1915, Ibis, p. 59.

Q (M.C.Z. 278596) Mtimbuka. 24.ii.49.
 juv. Q (M.C.Z. 278597) near Tete, M. 25.i.49.

SCOLOPACIDAE Tringa glareola Linné

Tringa Glareola Linné, 1758, Syst. Nat., ed. 10, 1, p. 149; Europe = Sweden (restricted).

Actitis hypoleucos (Linné)

Tringa Hypoleucos Linné, 1758, Syst. Nat., ed. 10, 1, p. 149; Europe = Sweden (restricted).

♂ (M.C.Z. 278599) near Tete, M. 24.i.49. Native name. Malisa (Nyungwe, who do not distinguish it from Tringa).

GLAREOLIDAE

Cursorius temminckii temminckii Swainson

Cursorius Temminckii Swainson, 1822, Zool. Illustr., 2, text to pl. cvi: No type locality = Senegal.

2 ♂ ♂ 2 ♀ ♀ 1 o (M.C.Z. 278600–4) near Tete, M. 26.i.49.

STERNIDAE

CHLIDONIAS LEUCOPTERA (Temminck)

Sterna leucoptera Temminek, 1815, Man. d'Orn., p. 483: Mediterranean Coasts.

2 ♂♂ (M.C.Z. 278605-6) Mtimbuka. 17.ii.49. Native name. Kawie (Yao) for the White-winged Black Tern.

COLUMBIDAE

COLUMBA ARQUATRIX ARQUATRIX Temminck

- Colomba (sic) Arquatrix Temminck, in Knip, 1809, Les Pigeons, les Colombes,p. 11, pl. v: South Africa = Antenoquoi Country, Cape Province.
 - 9 (M.C.Z. 278607) Zomba Plateau. 7.ix.48.
 - o (M.C.Z. 278608) Nyika Plateau. 5.xi.48.

Breeding. In November testes large.

Streptopelia semitorquata semitorquata Rüppell

Columba semitorquata Rüppell, 1837, Neue Wirbelth., Vögel, p. 66, pl. xxiii, fig. 2: Taranta Mountains, Ethiopia.

♀ (M.C.Z. 278609) Zomba Plateau. 7.ix.48.

Oena capensis capensis (Linné)

Columba capensis Linné, 1766, Syst. Nat., ed. 12, 1, p. 286: Cape of Good Hope.

9 (M.C.Z. 278610) near Tete, M. 8.i.49. Native name. Katunduru (Nyungwe).

APLOPELIA LARVATA LARVATA (Temminck)

- Columba larvata Temminck, in Knip, 1810, Les Pigeons, les Colombes, p. 71, pl. xxxi: Antenoquoi Country, i.e. Knysna, Cape Province.
 - ♂♀ (M.C.Z. 278611-2) Misuku Mtns. 15.x & 26.ix.48. Native name. Ntosi (Misuku).

Breeding. On September 26 ova were enlarging in the Lemon-Dove which was found in a native snare beside a path in the Matipa Forest.

PSITTACIDAE

Poicephalus Meyeri transvaalensis Neumann

Poicephalus meyeri transvaalensis Neumann, 1899, Orn. Monatsb., 7, p. 25: Transvaal.

♂ (M.C.Z. 278613) near Tete, M. 14.i.49. Native name. Gimpsi (Nyungwe).

MUSOPHAGIDAE

Tauraco Livingstonii Marungensis (Reichenow)

Turacus schalowi var. marungensis Reichenow, 1902, Vög. Afr., 2, p. 52: Marungu and north of Lake Nyasa.

> 2 & & & 1 & (M.C.Z. 278614-6) Vipya Plateau. 17.ix.48. & (M.C.Z. 278617) Misuku Mountains. 23.ix.48. 2 & & (M.C.Z. 278618-9) Nyika Plateau. 4-9.xi.48.

Benson (1940, p. 405; 1951, p. 86) prefers to treat the Marungu Lourie as a race of *schalowi* (Reichenow).

Native names. Chilembo (Misuku); hluhlulu (Ngoni). Breeding. On November 4, testes large.

Tauraco Livingstonii Livingstonii (Gray)

Turacus livingstonii G. R. Gray, 1864, Proc. Zool. Soc. London, p. 44: Manganja Highlands, 3000–4000 feet, Nyasaland.

¬ ♀ (M.C.Z. 278629-1) Lichenya Plateau. 11.viii.48.
¬ (M.C.Z. 278622) Zomba Plateau. 7.ix.48.

2 ♀ ♀ (M.C.Z. 278623-4) Cholo Mountain. 11-12.iii.49.

Type locality. R. E. Moreau writes that the Manganja Highlands are at the southern end of Zomba Plateau and the type must have come from between 15°30′ and 16° S., east of the Shire. It is wrongly placed on Reichenow's map; cf. map in Livingstone, 1865, Expedition to the Zambezi.

Native name. Skurukuru (Yao).

Breeding. On August 11, ova small. However, during the month Nyasa Louries were going about in pairs and constantly calling.

Parasites. Lice preserved.

CORYTHAIXOIDES CONCOLOR CONCOLOR (Smith)

Corythaix concolor A. Smith, 1833, S. Afr. Quart. Journ. (2), p. 48: Inland from Port Natal.

 ♂ (M.C.Z. 278632) Mtimbuka. 18.ii.49.

 3 ♂ ♂ , 4 ♀♀ (M.C.Z. 278625-31) near Tete, M. 8-27.i.49.

Native name. Kuwe (Nyungwe).

Breeding. On January 8, ovules small. Like Vincent (1934, p. 768), I found South African Goaway-Birds relatively common near Tete, where they provided a welcome addition to the larder.

CUCULIDAE

CUCULUS CANORUS subsp.

A bird heard calling "cuckoo" very distinctly in the early morning, was presumably the typical form rather than C. e. gularis Stephens (Mtimbuka, 5.ii.49).

CLAMATOR JACOBINUS PICA (Hemprich & Ehrenberg)

Cuculus pica Hemprich & Ehrenberg, 1833, Symb. Phys., Aves, sig. r. note 2: Ambukohl, Dongola.

♀ (M.C.Z. 278674) Mtimbuka. 11.ii.39.

For use of this name see footnotes to Peters (1940, p. 13), and Friedmann (1948, Washington Acad. Sci. Monogr., 1, p. 39).

Native name, Kawilangwaula (Yao).

CHRYSOCOCCYX KLAAS KLAAS (Stephens)

Cuculus Klaas Stephens, in Shaw, 1815, Gen. Zool., 9, p. 128: "Cape of Good Hope" etc. i.e. Cape Province.

♀ (M.C.Z. 278675) Misuku Mtns. 6.x.48.

♀ (M.C.Z. 278676) Cholo Mtn. 12.iii.49.

Native name. Kaicholocholo (Misuku).

Chrysococcyx caprius (Boddaert)

Cuculus caprius Boddaert, 1783, Table Pl. enlum, p. 40: Cape of Good Hope ex. Daubenton.

♂ (M.C.Z. 278677) Mtimbuka. 7.ii.49.

Centropus superciliosus burchellii Swainson

Centropus Burchelli Swainson, 1838 (1837), Anim. in Menag., p. 321: South Africa, i.e. Cape Province.

♂ ♀ (M.C.Z. 278678~9) ¼Itimbuka. 2.iii.49.

See Benson (1940, p. 403; 1951, p. 86) for discussion on Nyasaland records assigned to senegalensis fascii pygialis and related forms.

TYTONIDAE

Tyto capensis capensis (Smith)

Strix capensis A. Smith, 1834, S. Afr. Quart. Journ. (2), p. 317: South Africa; restricted to Cape Town by Mackworth-Praed & Grant.

9 (M.C.Z. 278680) Nyika Plateau. 8.xi.48. Breeding. On November 11, ova very small. Diet. In the stomach were fur and bones of an Otomys, presumably

kempi.

Habitat. Shot in a swamp where, judging by the numerous feathers, it habitually rested in a regular "form" beneath a bower of long grass. Cf. Vincent (1934, p. 789).

Bubo lacteus (Temminck)

Strix lactea Temminck, 1820, Pl. col., livr. 1, pl. iv: Senegal.

♂ (M.C.Z. 278681) Chitala River. 18.xii.48.

Shot in an enormous Acacia albida growing on the bank of the dry river bed.

Dict. The stomach held remains of a snake 400 mm. long (Aparallactus sp.) whose eggs measured 30 x 8 mm.; one adult toad (Bufo carens) and the remains of two more; five very large solpugids; and one centipede, 100 mm. in length, that conceivably the snake might have been engaged in swallowing when seized.

GLAUCIDIUM PERLATUM (Vieillot)

Strix perlata Vieillot, 1818, Nouv. Diet. Hist. Nat., 7, p. 26: Senegal.

o o (M.C.Z. 278682-3) near Tete, M. 14-24.i.49.

Native name. Ndsidsi (Nyungwe).

If Rand's (1951, Nat. Hist. Misc., No. 86) conclusions are correct, then these birds should be assigned to *lieua* (Lichtenstein) of South Africa. On the basis of M.C.Z. material, however, the three races appeared ill-defined to the junior author.

Breeding. In January, testes small.

Diet. One Pearl-spotted Owlet was shot at dusk while engaged in eating a nightjar (S. f. mossambicus of which part was in its claws and part in its stomach; the stomach of the other owlet held a skink (Riopa sundevallii) and huge cricket (Brachytrupetes membranaceus).

STRIGIDAE

Ciccaba woodfordii woodfordii (Smith)

Noctua Woodfordii A. Smith, 1834, S. Afr. Quart. Journ. (2), p. 312: South Africa.

juv. ♂ (M.C.Z. 278684) Misuku Mtns. 12.x.48.

Native name. Mpuulu (Misuku).

Breeding. Halfgrown in nestling plumage. On the crown each downy feather is buffy at base, separated by a narrow rufous to dark

brown crossbar from the white tip; white predominates on the forehead and pale brown on the back to the tail coverts while the breast is mainly buffy; the flight feathers and tail are dark brown narrowly barred with paler; tail feathers broadly tipped with white; legs on to bases of the toes clothed in buffy white down.

CAPRIMULGIDAE

CAPRIMULGUS POLIOCEPHALUS GUTTIFER Grote

Caprimulgus pectoralis guttifer Grote, 1921, Journ. f. Orn., 69, p. 125: Mlalo, Usambara Mountains, Tanganyika Territory.

♀ (M.C.Z. 278685) Vipya Plateau. 17.ix.48.

Native names. Lunkuwe (Misuku); nalwewe (Ngoni).

The senior author put this skin on one side for further study. When circumstances made this impossible, the bird was sent to Dr. Chapin who replied (13.v.52): "I have compared your Vipya \circ with four \circ \circ of C. p. ruwenzorii. It scarcely differs from ruwenzorii in color of head and body, but has somewhat smaller white areas at the tips of the outer tail quills. There is no doubt as to the Vipya bird being guttifer."

Breeding. On September 17, ovules enlarged, the largest 4 mm. On September 23 one of the natives engaged in clearing bracken from a site selected for my tent at the forest edge, Misuku Mountains, invited attention to a pair of nightjar eggs lying on bare ground without any attempt at a nest. The eggs were white, blotched and mottled all over with pale brown, and measured 26 x 20 mm. Both eggs were cold; one was almost fresh, the other held a well-developed embryo. On September 29 a bird was flushed from two eggs laid on absolutely bare ground at the base of a stunted tree (in which was a bees' nest) in the centre of an extensive burnt-over area surrounded by secondary forest, also on the Matipa-Willindi Ridge. Both eggs were blowable though containing traces of embryos. The parent birds were not collected but Benson (1949, Ann. Transvaal Mus., 21, p. 166) concurs in attributing them to guttifer.

Parasites. Nematode worms (Aprocta sp.) were removed from the eye.

SCOTORNIS FOSSII MOSSAMBICUS (Peters)

Caprimulgus mossambicus Peters, 1868, Journ. f. Orn., 16, p. 134: Inhambane, Mozambique.

2 ♂♂, 1 ♀ (M.C.Z. 278686–8) near Tete, M. 11–25.i.49. Grant & Mackworth-Praed (1937, Bull. B.O.C., **58**, p. 18) recognize no races.

Native name. Bumpwa (Nyungwe, for all nightjars).

Enemies. A fourth nightjar was being devoured by a Pearl-spotted Owlet (G. perlatum) scarcely larger than itself.

Semeïophorus vexillarius Gould

Semezophorus (Macrodypteryx) vexillarius Gould, 1838, Icones Av., pt. 2, pl. (13) and text; orig. type loc. erroneous = Sierra Leone.

♂ (M.C.Z. 278689) near Tete, M. 14.i.49. Native name. Bumpwa (Nyungwe, for all nightjars).

TROGONIDAE

HETEROTROGON VITTATUS VITTATUS (Shelley)

Hapaloderma vittatum Shelley, 1882, Proc. Zool. Soc. London, p. 306: Mamboio, Tanganyika Territory.

 $3 \circlearrowleft \circlearrowleft, 1 \circlearrowleft (M.C.Z. 278690-3)$ Misuku Mtns. 24.ix–1.x.48. Native name. Pelependwe (Misuku).

ALCEDINIDAE CERYLE MAXIMA MAXIMA (Pallas)

Alcedo maxima Pallas, 1769, Spic. Zool., fasc. 6, p. 14: Cape of Good Hope.

♂♀ (M.C.Z. 278694–5) Mtimbuka. 14.ii.49. Natire name. Namkapakapa (Yao).

Ceryle rudis rudis (Linné)

Alcedo rudis Linné, 1758, Syst. Nat., ed. 10, 1, p. 116; Egypt.

♂ (M.C.Z. 278696) Mtimbuka. 17.ii.49.

Native name of Pied Kingfisher. Namkapakapa (Yao, but not specific).

Alcedo cristata cristata (Pallas)

Alcedo cristata Pallas, in Vroeg, 1764, Cat., Adumbr., p. 1: Cape of Good Hope.

oⁿ ♀ (M.C.Z. 278697-8) Mtimbuka. 17.ii.49. Native name of Malachite Kingfisher. Changombe (Yao).

MEROPIDAE

Melittophagus pusillus meridionalis Sharpe

Melittophagus meridionalis Sharpe, 1892, Cat. Bds. Brit. Mus., 17, p. 44 (in key), p. 45, pl. i, fig. 4: "Southeastern Africa from Natal to the Zambezi," etc. type in Brit. Mus. from Pinetown, Natal.

♂ ♂ (M.C.Z. 278699-700) near Tete, M. 22.i.49.

Native name. Songosongo (Nyungwe). It is a curious coincidence that the name for the Southern Little Bee-eater should be so similar to the Manganja one for the Black Mamba, which they call songo.

Aerops военмі (Reichenow)

Merops (Melittophagus) bochmi Reichenow, 1882, Orn. Centrabl., 7, p. 62: Bumi, Tanganyika Territory.

Q (M.C.Z. 278701) Mtimbuka. 28.ii.49.

This was the only Böhm's Bee-eater seen during nine months, which tends to confirm Benson's (1940, p. 412) opinion that the species is decidedly uncommon in Nyasaland. Vincent, apparently, did not encounter it at all.

Native name. Kasakangoni (Yao).

Merops superciliosus persicus Pallas

Merops persicus Pallas, 1773, Reise versch. Prov. Russ. Reichs, 2, p. 708: Shores of Caspian Sea.

1 ♂, 2 ♀ ♀ (M.C.Z. 278702–5) near Tete, M. 7–14.i.49. Native name. Kafudya (Nyungwe, but not specific). Breeding. Ova small.

Merops nubicoides Des Murs & Pucheran

Merops nubicoides Des Murs & Pucheran, 1846, Rev. Zool., p. 243: "Port Natal" in error = Ouri River, Transvaal.

1 ♂, 2 ♀ ♀ (M.C.Z. 278706-8) near Tete, M. 10-12.i.49.

Vincent (1934, p. 780) and Benson (1940, p. 412) treat the Southern Carmine Bee-eater as a race of *nubicus*. The reasons for considering it a full species have been given by Chapin (1939, p. 322) and followed by Peters (1945, p. 238). Chapin (note of 29.v.52) still considers *nubicoides* sufficiently distinct to be regarded as a full species.

Native name. Kafudya (Nyungwe, but not specific).

CORACHDAE

Coracias garrulus garrulus (Linné)

Coracias Garrulus Linné, 1758, Syst. Nat., ed. 10, 1, p. 107: Europe = Sweden (restricted).

99 (M.C.Z. 278709–10) near Tete, M. 10.i.49.

Native name. Kakeya (Nyungwe, but generic).

Diet. Frog's bones preserved from stomach.

Coracias caudata caudata Linné

Coracias caudata Linné, 1766, Syst. Nat., ed. 12, 1, p. 160: Angola.

♂ ♀ (M.C.Z. 278711-2) near Tete, M. 12-19.i.49.

Native name. Kakeya (Nyungwe, but generic).

Diet. Had eaten nauseous bugs of the same species that swarmed in my tent on the night (5.i.49) of our arrival at Kasumbadedza.

Eurystomus glaucurus suahelicus Neumann

Eurystomus afer suahelicus Neumann, 1905, Journ. f. Orn., **53**, p. 186: "Tschara" i.e. Chara, Tana River, Kenya Colony.

♂ (M.C.Z. 278713) Mtimbuka. 19.ii.49.

Native name. Chole (Yao).

Breeding. Testes very small.

Diet. Only a large scarab in stomach at 6 A.M. when this roller was resting on an aloe pole surrounded by twittering birds that mistook it for a hawk.

UPUPIDAE

UPUPA EPOPS AFRICANA Bechstein

Upupa africana Bechstein, 1811, Kurze Uebers., 4, Th. 1, p. 172: Congo to the Cape.

♂ (M.C.Z. 278714) near Tete, M. 21.i.49.

Native name. Mofsi (Nyungwe).

PHOENICULIDAE

Phoeniculus purpureus marwitzi (Reichenow)

Irrisor erythrorhynchos marwitzi Reichenow, 1906, Orn. Monatsb., 14, p. 171: Mkalama, Tanganyika Territory.

♂ (M.C.Z. 278715) Mtimbuka. 2.iii.49.

Rhinopomastus cyanomelas schalowi Neumann

Rhinopomastus schalowi Neumann, 1900, Journ. f. Orn., 48, p. 221: Usandawe, Tanganyika Territory.

ad. &, imm. & (M.C.Z. 278716-7) near Tete, M. 17.i.49.

BUCEROTIDAE

Tockus pallidirostris neumanni (Reichenow)

Lophoceros pallidirostris neumanni Reichenow, 1894, Vög. Deutsch Ost.-Afr., p. 128: Mgera, Tanganyika Territory.

♀ (M.C.Z. 278718) Likabula River. 1,viii.48.

Diet. Praying mantis and Phymateus in stomach.

Parasites. Nematode (Physaloptera sp.) was preserved.

Tockus flavirostris leucomelas (Lichtenstein)

Buceros leucomelas Lichtenstein, 1842, Verz. Samml. Vög. Kafferul., p. 17: Kaffirland.

♂ ♂ (M.C.Z. 278719-20) near Tete, M. 21-26.i.49.

Native name. Goto (Nyungwe).

Diet. Beetles and fruit seeds in stomach.

Bycanistes brevis brevis Friedmann

Bycanistes cristatus brevis Friedmann, 1929, Proc. New Eng. Zoöl. Club, 11, p. 32: Mount Lutindi, Usambara Mountains, Tanganyika Territory.

o² ♀ (M.C.Z. 278721-2) Misuku Mtns. 12.x.48. Native name, Nonga (Misuku).

CAPITONIDAE

Pogoniulus leucomystax leucomystax Sharpe

Barbatula leucomystax Sharpe, 1892, Ibis, p. 310; Sotik, Kenya Colony.

 $\ensuremath{\mathcal{O}}$ (M.C.Z. 278723) Nyika Plateau. 6.xi.48.

Breeding. Testes large.

Pogoniulus chrysoconus rhodesiae Grant

Pogoniulus chrysoconus rhodesiae C. H. B. Grant, 1915, Bull. Brit. Orn. Club,35, p. 100: Chambezi Valley, northeastern Rhodesia.

♂ (M.C.Z. 278724) Mtimbuka. 1.iii.49.

Native name. Nangololo (Yao).

Peters rejected the idea of this bird being *P. e. extoni* (Layard), used by Vincent (1935, p. 8) for birds from eastern Mozambique.

Pogoniulus bilineatus bilineatus (Sundevall)

Megalaema bilineata Sundevall, 1850, Osfv. K. Vet.-Akad. För., 7, p. 109: "Caffraria inferiore," type from Umlazi River, Natal.

2 ♂♂, 2 ♀♀ (M.C.Z. 278725-8) Cholo Mtn. 19-23.iii.49.

All these birds were heard making their froglike calls afar off in the forest and were summoned to the trees above us by our imitation of the note. See Benson (1948, Ibis, p. 60).

Trachyphonus vaillantii vaillantii > < suahelicus

♂ (M.C.Z. 278729) near Tete, M. 26.i.49.

An absolute intermediate between the South African vaillantii and the race described from Useguha, Tanganyika Territory.

Native name. Sakamalia (Nyungwe).

INDICATORIDAE

Prodotiscus insignis zambesiae Shelley

Prodotiscus zambesiae Shelley, 1894, Ibis, p. 8: Zomba, Nyasaland.

♀ (M.C.Z. 278730) Ruo R., Mlanje Mtn. 7.iv.49.

Diet. At 4 p.m. this Sharp-billed Honey-Guide was feeding on termites flighting after three days and nights of incessant rain.

PICIDAE

CAMPETHERA ABINGONI ABINGONI (Smith)

Chrysoptilus Abingoni A. Smith, 1836, Report Exped. Centr. Afr., p. 53: "Port Natal," i.e. Durban, Natal.

♀♀ (M.C.Z. 278732-3) Mtimbuka. 11.ii.49.

♀ (M.C.Z. 278731) near Tete, M. 17.i.49.

The two Mtimbuka woodpeckers were killed on an acacia trunk with a single shot.

Native name. Namagogoda (Yao).

Dendropicos fuscescens fuscescens (Vieillot)

Picus fuscescens Vieillot, 1818, Nouv. Dict. Hist. Nat., 26, p. 86: South Africa; restricted to Grootvaders Bosch by Roberts.

♂ (M.C.Z. 278734) Mtimbuka. 1.iii.49.

We are aware that Vincent (1935, p. 19) referred his Fort Johnston ♂♂ to D. f. hartlaubii, and Benson (1951, p. 91) following C. M. N. White's revision (1947, Ibis, p. 611), refers a Mzimba ♀ to D. f.

camacupae Bowen. In view of White's conclusion, Benson, who has not seen the birds, suggests that both Mtimbuka and Tete birds should be referred to camacupae.

Dendropicos fuscescens hartlaubii Malherbe

Dendropicos Hartlaubii Malherbe, 1849, Revue et Mag. Zool. (2), 1, p. 532; Zanzibar.

Q (M.C.Z. 278735) near Tete, M. 13.i.49.

At a height of three feet from the ground, this Zanzibar Cardinal Woodpecker was clinging to, and hammering at, a hollow stick with extraordinary sonic effect. The bird, killed clean with No. 12 shot, remained clinging to the stick, the sole indication of her sudden death being the falling back of her head.

Mesopicos griseocephalus ruwenzori (Sharpe)

Mesopicos ruwenzori Sharpe, 1902, Bull. Brit. Orn. Club. 13, p. 8; Ruwenzori Mountains.

♂ (M.C.Z. 278736) Nyika Plateau. 2.xi.48.

Benson (1940, p. 432) records this race from many localities in northern Nyasaland.

Breeding. Testes very small.

ALAUDIDAE

Mirafra Africana nyikae Benson

Mirafra africana nyikae Benson, 1939, Bull. Brit. Orn. Club, **59**, p. 85: Nyika Plateau, 8000 feet, Nyasaland.

♂ (M.C.Z. 278737) Nyika Plateau. 30.x.48.

Breeding. Testes large. Benson (1940, p. 583) found nest and eggs in November.

Eremopterix leucotis smithi (Bonaparte)

Pyrrhulauda smithi Bonaparte, 1850, Consp. Gen. Av., 1, p. 512: South Africa.

♂ ♂ (M.C.Z. 278738–9) near Tete, M. 10–17.i.49.

Native name. Ntolima (Nyungwe).

HIRUNDINIDAE

RIPARIA CINCTA SUAHELICA VAN Someren

Riparia cincta suahelica van Someren, 1922, Nov. Zool., 29, p. 90: Escarpment, Kenya Colony.

♂ (M.C.Z. 278740) Nyika Plateau. 16.xi.48.

Probably the second authentic *suaheliea* to be taken in Nyasaland (cf. Benson, 1951, p. 106).

HIRUNDO RUSTICA RUSTICA Linné

Hirundo rustica Linné, 1758, Syst. Nat., ed. 10, 1, p. 191: Europe = Sweden (restricted).

♂ & ? (M.C.Z. 278746-7) near Tete, M. 7.i.49. Native name. Kandarenya (Nyungwe for swallows).

HIBUNDO ATROCAERULEA Sundevall

Hirundo atrocaerulca Sundevall, 1850, Oefv. K. Sv. Vet.-Akad. Förh., 7, p. 107: "Caffraria inferiore" type from Umvoti, Natal.

2 ♂♂, 1 ♀ (M.C.Z. 278748–50) Nyika Plateau. 30.x–17.xi.48.

Breeding. Testes large. See Benson (1951, p. 104) regarding nest and eggs collected 17.xi.48.

HIRUNDO SMITHII SMITHII Leach

Hirundo smithii Leach, in Tuckey, 1818, Voy. R. Zaire, App., p. 407: Chisalla Island, lower Congo, Belgian Congo.

♂ ♀ (M.C.Z. 278751-2) near Tete, M. 7.i.49. Native name. Kandarenya (Nyungwe, for swallows).

Pseudohirundo griseopyga griseopyga Sundevall

Hirundo griscopyga Sundevall, 1850, Oefv. K. Sv. Vet.-Akad. Förh., 7, p. 107: Port Natal, i.e. Durban, Natal.

♂♂ (M.C.Z. 278741-2) Misuku Mtns. 5.x.48. Natire name. Kavileviswa (Misuku, for swallows).

PSALIDOPROCNE ORIENTALIS ORIENTALIS Reichenow

Psalidoprocne petiti orientalis Reichenow, 1889, Journ. f. Orn., **37**, p. 277: Lewa, Usambara District, Tanganyika Territory.

ੋਂ ਨੇ (M.C.Z. 278744-5) Ruo R., Mlanje Mtns. 8.iv.49.

Sclater (1930, p. 588) was in error in placing this particular Lewa in Dodoma District. Neumann locates it in Usambara when describing *Ploceus ocularius suahelicus* of which it is the type locality.

PSALIDOPROCNE ALBICEPS Sclater

Psalidoprocne albiceps P. L. Sclater, 1864, Proc. Zool. Soc. London, p. 108, pl. xiv: "Uzinza i.e. Uvinza", Tabora District, Tanganyika Territory.

of (M.C.Z. 278743) Misuku Mtns. 15.x.48.

The junior author has ventured to amend the type locality. In his copy of Speke's "Journal of Discovery" this well-known locality certainly appears as "Uzinza" (pp. 107, 142), but in the Index as "Uzuiza."

Native name. Kavileviswa (Misuku, but not specific).

DICRURIDAE

DICRURUS ADSIMILIS ADSIMILIS (Bechstein)

Corvus adsimilis Bechstein, 1794, Allgem. Uebers. Vögel, 2, p. 362: South Africa.

3 ♂♂ (M.C.Z. 278753-5) near Tete, M. 10-25.i.49.

Native name. Ntengu (Nyungwe).

The of of in immature plumage were shot on January 10th, the adult at dusk when calling "tu-whit" in a mango tree.

DICRURUS LUDWIGH LUDWIGH (Smith)

Edolius Ludwigii A. Smith, 1834, S. Afr. Quart. Journ. (2), p. 144: "Port Natal," i.e. Durban, Natal.

(M.C.Z. 278756) Cholo Mountain. 22.iii.49.
 (M.C.Z. 278757) Ruo R., Mlanje Mtn. 1.iv.49.

ORIOLIDAE

Oriolus auratus notatus Peters

Oriolus notatus Peters, 1868, Journ. f. Orn., 16, p. 132: Tete, Mozambique.

♂ ♂ (M.C.Z. 278758-9) near Tete, M. 12.i.49.

Native name. Changala (Nyungwe).

Breeding. Testes small, though the birds appeared to be courting.

TIMALIIDAE

Turdoides jardinei kirkii (Sharpe)

Crateropus kirkii Sharpe, in Layard, 1876, Bds. S. Africa, ed. 2, p. 213: "Zambesi country," type in Brit. Mus. from "Mazzaro."

♀ (M.C.Z. 278760) Chitala River. 14.xii.48.

♀ ♀ (M.C.Z. 278761-2) Mtimbuka. 21.ii-2.iii.49.

Native name. Namguroro (Yao).

Breeding. In mid-December, ova enlarging.

PYCNONOTIDAE Pycnonotus barbatus micrus Oberholser

Pyenonotus layardi micrus Oberholzer, 1905, Proc. U. S. Nat. Mus., 23, p. 891: Taveta, Kenya Colony.

9 (M.C.Z. 278763) Nchisi Mtn. 27.xi.48.

Also taken on Nchisi by Vincent (1935, p. 358) who discusses range and area of intermediates. Peters treated micrus as a race of tricolor but both Chapin and Benson consider barbatus as more appropriate.

Native name. Pumbwa (Chewa).

Phyllastrephus terrestris suahelicus Reichenow

Phyllastrephus capensis suahelicus Reichenow, 1904, Vög. Afr., 3, p. 405: Msua, Bagamoyo District, Tanganyika Territory.

Phyllastrephus capensis intermedius Gunning & Roberts, 1911, Ann. Transvaal Mus., 3, p. 115: Umbelluzi River, Mozambique.

 $2 \circlearrowleft \circlearrowleft , 2 \circlearrowleft \circlearrowleft (M.C.Z. 278764-7)$ near Tete, M. 10-21.i.49.

These skins were compared with near topotypes of *suahelicus* as well as with a paratype of *intermedius* in the British Museum. Noome is the name of the collector (cf. Roberts, 1917, Ann. Trans. Mus., 5, p. 259), not the type locality as given in Sclater (1930, p. 382, footnote).

Phyllastrephus flavostriatus vincenti Grant & Praed

Phyllastrephus flavostriatus vincenti Grant & Praed, 1940, Bull. Brit. Orn. Club, 60, p. 62: Namuli Mountain, Quelimane Province, Mozambique.

- 9 (M.C.Z. 278768) Chiradzulu Mtn. 26.viii.48.
- 9 (M.C.Z. 278769) Cholo Mtn. 22.iii.49.
- 9 (M.C.Z. 278770) Ruo R., Mlanje Mtn. 31.iii.49.

It is but fair to state that the senior author referred these skins to *P. f. tenuirostris* (Fischer & Reichenow) of Lindi, Tanganyika Territory, in the absence of comparative material of *vincenti*.

Phyllastrephus flavostriatus alfredi (Shelley)

Bleda alfredi Shelley, 1903, Bull. Brit. Orn. Club, 13, p. 61: Mwenembe, 7500 feet, Nyika Plateau, Nyasaland.

9 (M.C.Z. 278771) Nyika Plateau. 2.xi.48.

Benson (1951, p. 93) gives detailed reasons for regarding alfredi as a race of flavostriatus (Sharpe).

PHYLLASTREPHUS FISCHERI PLACIDUS (Shelley)

Xenocichla placida Shelley, 1889, Proc. Zool. Soc. London, p. 363; Kilimanjaro, 6000 feet, Tanganyika Territory.

♀ (M.C.Z. 278772) Misuku Mtns. 1.x.48.

2 ♂♂, 1 ♀ (M.C.Z. 278773-5) Cholo Mtn. 19-23.iii.49.

Native name. Chipie (Misuku, but not generic).

Arizelocichla tephrolaema fusciceps (Shelley)

Xenocichla fusciceps Shelley, 1893, Ibis, p. 13: "Milanji" i.e. Mlanje Plateau, 4000 to 6000 ft., Nyasaland.

5 ♂ ♂ , 1 ♀ (M.C.Z. 278776–81) Lichenya Plateau. 10–19.viii.48.

♀ (M.C.Z. 278782) Zomba Plateau. 8.ix.48.

♀♀ (M.C.Z. 278783-4) Nyika Plateau. 1-9.xi.48.

The Lichenya series are topotypes from 6000 ft. on Mlanje for Vincent (1935, p. 368) considered the original altitude probably too low. Delacour (1943, Zoologica, 28, p. 23) considers Arizelocichla a synonym of Andropadus and then only a subgenus of Pyenonotus; for the present we have followed Sclater.

Breeding. For nest and eggs collected 1.xi.48, see Benson (1951,

p. 94) under A. tephrolaema fusciceps.

Arizelocichla milanjensis striifacies (Reichenow & Neumann)

Xenocichla striifacies Reichenow & Neumann, 1895, Orn. Monatsb., 3, p. 74: Marangu, Kilimanjaro Mtn., Tanganyika Territory.

♂ (M.C.Z. 278785) Misuku Mtns. 15.x.48. Native name. Ukorokoro (Misuku).

Arizelocichla masukuensis masukuensis (Shelley)

Andropadus masukuensis Shelley, 1897, Ibis, p. 534: "Masuku" i.e. Misuku Mtns., 7000 ft., Nyasaland.

 $\, \circ \,$ (M.C.Z. 278786) Misuku M
tns. 29.ix.48.

Native name. Chipie (Misuku, but not even generic).

Breeding. On October 4, situated in a bramble-bracken thicket within two feet of the ground just inside Matipa Forest, I flushed a bulbul, apparently of this species, from a cup-shaped nest. The nest measured about 90×90 mm. by 60 mm. deep, and was formed of fibres trimmed with green moss and lined with grasses. It held two eggs measuring ca. 22×15 mm., one quite fresh, the other near hatching,

of a white or pinkish white ground color heavily blotched with chocolate brown and a little mauve; the brown especially thick around

the larger pole.

Benson (1949, Ann. Transvaal Mus., 21, p. 169) concurs that this clutch agrees with that of masukuensis, but also with the eggs of *Phyllastrephus fischeri*, a race of which also occurs in Matipa Forest.

Chlorocichla flaviventris occidentalis Sharpe

Chlorocichla occidentalis Sharpe, 1881, Cat. Bds. Brit. Mus., 6, p. 113, pl. viii: Angola.

4 ♂♂, 2 ♀♀ (M.C.Z. 278787-92) near Tete, M. 19.i.49.

All shot from one tree where they were feeding on ripening berries. For discussion about intermediates, see Vincent (1935, p. 372).

Native name. Changala (Nyungwe).

Andropadus virens zombensis Shelley

Andropadus zombensis Shelley, 1894, Ibis, p. 10: Zomba, Nyasaland.

♂ ♂ (M.C.Z. 278793-4) Misuku Mtns. 29.ix-9.x.48.

Regarded by Sclater (1930, p. 395) as a synonym of Eurillas virens Cassin of the Gaboon, with E. v. virens in northern (Benson, 1940, p. 594), and v. zombensis in southern (Benson, 1951, p. 94) Nyasaland. But Benson points out that Grant & Praed (1940, Bull. Brit. Orn. Club, 60, p. 64) now refer all Nyasaland birds to v. zombensis.

Native name. Chipie (Misuku, but not even generic).

TURDIDAE

Turdus libonyanus tropicalis Peters

Turdus tropicalis Peters, 1881, Journ. f. Orn., 29, p. 50: Inhambane, Mozambique.

o ♀ (M.C.Z. 278795-6) near Tete, M. 14-21.i.49.

Native name. Jigu (Nyungwe).

Breeding. In worn breeding plumage.

Turdus olivaceus nyikae Reichenow

Turdus nyikae Reichenow, 1904, Orn. Monatsb., 12, p. 95; Nyika Plateau, Nyasaland.

♀ (M.C.Z. 279080) Nyika Plateau. 30.x.48. Breeding. See Benson (1951, p. 97) regarding nest and eggs collected.

Geokichla gurneyi gurneyi (Hartlaub)

Turdus gurneyi Hartlaub, in Gurney, 1864, Ibis, p. 350, pl. ix. near Pieter-maritzburg, Natal.

♀♀ (M.C.Z. 278797) Nyika Plateau. 2-6.xi.48.

These birds do not differ from an example of typical gurneyi from Pondoland in size of bill. Vide Vincent (1935, pp. 487-8). Benson (1950, Ostrich, p. 29) also refers Nyika birds to the nominate form. Breeding. On November 6, ova enlarged.

Geokichla Litsipsirupa stierlingi Reichenow

Geocichla litsitsirupa stierlingi Reichenow, 1900, Orn. Monatsb., 8, p. 5: Iringa, s.w. Tanganyika Territory.

♀ (M.C.Z. 278799) Vipya Plateau. 17.ix.48.

Native name. Mwilo (Misuku); pipiyo (Ngoni); pingoli (Timbuka). Benson informs us that the occurrence of this bird on the Vipya Plateau is unusual for it is normally an inhabitant of the Brachystegia woodland at 3000 to 5000 feet.

Monticola angolensis Sousa

Monticola angolensis Sousa, 1888, Jorn. Sci. Lisboa, 12, pp. 225, 233; Caconda, Angola.

ੋਂ ਫ਼ੋ (M.C.Z. 278801-2) Chiradzulu Mtn. 28-31.viii.48.

Oenanthe oenanthe oenanthe (Linné)

Motacilla Oenanthe Linné, 1758, Syst. Nat., ed. 10, 1, p. 186; Europe = Sweden (restricted).

imm. of (M.C.Z. 278800) Nyika Plateau. 27.x.48.

Breeding. Gonads small in this winter migrant. See also Benson (1951, p. 97).

Saxicola torquata caffra Keyserling & Blasius

Saxicola Rubicola var. Caffra Keyserling & Blasius, 1840, Die Wirbelthiere Europa's 1, p. lix; South Africa (in Berlin Museum).

Pratincola torquata orientalis W. L. Schater, 1911, Ibis, p. 409; Umfolosi Station, Zululand.

♀ (M.C.Z. 278803) Zomba Plateau. 8.ix.48.

♂ ♀ (M.C.Z. 278804, 279081) Nyika Plateau. 3-6.xi.48.

Benson invites our attention to Vincent's (1949, Ostrich, p. 19) note

on the use of this name which even antedates *robusta* (Tristram, 1870), regarded as indeterminate (but cf. Meinertzhagen, 1945, Ibis, pp. 290–291).

Breeding. In November, gonads enlarged. See Benson (1951, p. 99)

regarding nest and eggs collected.

Cossypha caffra Iolaema Reichenow

Cossypha caffra iolaema Reichenow, 1900, Orn. Monatsb., 8, p. 5: East Africa, i.e. Kilimanjaro, fide Gyldenstolpe.

♂ (M.C.Z. 278805) Lichenya Plateau. 19.viii.48.

♂ ♀ (M.C.Z. 278806-7) Zomba Plateau. 7-10.ix.48.

♂ ♀ (M.C.Z. 278808-9) Nyika Plateau. 1-8.xi.48.

Breeding. On November 8, ova enlarged though bird brooding. On November 13 Benson (1951, p. 98) found one nesting on Vipya Plateau.

Bessonornis anomala macclounii (Shelley)

Callene macclounii Shelley, 1903, Bull. Brit. Orn. Club, 13, p. 61: "Nwenembe," misprint for Mwenembe, 7500 feet, Nyika Plateau, Nyasaland.

♀ (M.C.Z. 278810) Nyika Plateau. 29.x.48.

This Nyika White-throated Robin-Chat was obtained near my camp, just two miles south of the type locality. For its relationship to anomala see Moreau (1950, Ibis, p. 642).

Cichladusa arquata Peters

Cichladusa arquata Peters, 1863, Monatsb. Akad. Wiss. Berlin, p. 134; Sena, Zambezi River, Mozambique.

2 ♂ ♂ , 2 ♀ ♀ (M.C.Z. 278811–4) Mtimbuka. 11.ii–2.iii.49. Native name. Lumbusi (Yao).

Pogonocichla stellata orientalis (Fischer & Reichenow) (Plate 2, figure 2)

Tarsiyer orientalis Fischer & Reichenow, 1884, Journ. f. Orn., p. 57: Pangani River, Tanganyika Territory.

Pogonocichla johnstoni Shelley, 1893, Ibis, p. 18: "Mlianji" i.e. Mlanje Plateau, Nyasaland.

♀ (M.C.Z. 278815) Zomba Plateau. 10.ix.48.
 2 ♂ ♂ , 3 ♀ ♀ (M.C.Z. 278816-21) Misuku Mtns. 29.ix.-2.x.48.

 \circlearrowleft (M.C.Z. 278822) Nyika Plateau. 3.xi.48. The series was identified with *orientalis* in the field by Benson who formerly (1940, p. 614) referred birds from these localities to *johnstoni*, now regarded as a synonym (cf. Moreau, 1951, Ibis, p. 385).

Native name. Natangere (Misuku).

Breeding. On October 1 a White-starred Bush-robin was sitting on two eggs in a nest built among drifted leaves and sprays of bramble covering a clearing in an outlying patch of Matipa Forest. On the same date a bird in immature plumage was collected. Another of these robins was found dead in a snap-back trap set for mice.

SYLVHDAE

Phylloscopus trochilus trochilus (Linné)

Motacilla Trochilus Linné, 1758, Syst. Nat., ed. 10, 1, p. 188: Europe = England (restricted).

4 of of (M.C.Z. 278823-6) near Tete, M. 7-11.i.49.

Vincent (1935, p. 508) with reservations, tentatively refers his willow-warblers, taken at Tete in March, to P.t. eversmanni (Bonaparte), now generally regarded as synonymous with P.t. acredula (Linné), see Benson (1940, p. 616). Chapin writes (13.v.52) that while he feels "sure that many P.t. acredula migrate to eastern Africa, it is extremely difficult to recognize them in winter condition." After drawing attention to the fact that three of our four Tete birds are in moult, he states that he sees no evidence of any being acredula but considers that all are P.t. trochilus. The latter is a subspecies whose "upper parts in breeding plumage are slightly greenish, breast dull pale yellow, and wings of 61–71.5 mm., those of the Q Q being smaller than those of the Q Q, which, in the four Tete Q Q are 67–69 mm." Native name. Timba (Nyungwe).

Seicercus ruficapilla johnstoni Sclater

Seicercus ruficapilla johnstoni W. L. Sclater, 1927, Bull. Brit. Orn. Club, 48, p. 13: "Kombi, Masuka Range" i.e. Misuku Mtns., Nyasaland.

- ♀ (M.C.Z. 278827) Zomba Plateau. 6.ix.48.
- ♀ ♀ (M.C.Z. 278828-9) Misuku Mtns. 23.ix-5.x.48.
 - ♀ (M.C.Z. 278830) Nyika Plateau. 9.xi.48.

Native name. Kaiyera (Misuku).

Breeding. In November, ova small.

Bradypterus cinnamomeus nyassae Shelley

Bradypterus nyassac Shelley, 1893, Ibis, p. 16; "Milanji" i.e. Mlanje Plateau, 6000 ft., Nyasaland.

3 ♂♂, 4 ♀♀ (M.C.Z. 278831-7) Nyika Plateau. 28.x-13.xi.48.

This identification, originally made in the field by Benson, has been confirmed by Chapin, who remarks that as these warblers appear to be in very worn breeding dress they are consequently less rufous on the upper parts, chest and flanks than two Rungwe birds (A.M.N.H.) which are in fresh plumage, having been taken in June.

"From the presence of very short outer retrices in all but one of the series," Chapin concludes that all except one would develop twelve quills in the tail. The one in question, a Q, "shows a very short outermost quill on one side so it cannot be referable to mariae. In some regions cinnamomeus very often has only ten. Differences in the number of tail quills is not a generic character and I do not regard Sathrocercus as a valid genus."

Breeding. On November 6, testes large in one \bigcirc , small in two others; ova small in two \bigcirc \bigcirc .

Bradypterus Mariae usambarae Reichenow

Bradypterus usambarae Reichenow, 1917, Journ. f. Orn., 65, p. 391; Usambara Mtns., Tanganyika Territory.

9 (M.C.Z. 278838) Nyika Plateau. 6.xi.48.

Of this bird Chapin writes on 19.iv.52: "It is often hard to count the tail-quills in these birds. B. m. usambarae should have only ten. Your specimen has nine, having lost the outermost one on the right side. I have compared it with two birds from Rungwe and two from Usambara. It is just a trifle more rufous on crown and back than the Rungwe birds but can almost be matched by one from the Usambara. I am a little surprised that there are no dusky shaft-streaks on the fore-neck of the Nyika bird, but that character is variable. I think it best to call it B. m. usambarae for, according to Benson (1939, p. 110) the race granti, which extends north supposedly to the Vipya Plateau, is still more ruddy. It seems likely that the whole mariae group may yet be considered conspecific with B. barratti." See also Benson (1940, p. 618).

APALIS MURINA MURINA Reichenow

Apalis murina Reichenow, 1904, Orn. Monatsb., 12, p. 28: Mararupia, Ruvuma River Valley, Tanganyika Territory.

 $3 \circlearrowleft \circlearrowleft (M.C.Z.~278861-3)$ Misuku Mtns. ~2-14.x.48. Native name. Masakagakia (Misuku).

Apalis murina youngi Kinnear

Apalis thoracica youngi Kinnear, 1936, Bull. Brit. Orn. Club, 57, p. 8: Vipya Plateau, 6000 feet, Nyasaland.

3 ♂ ♂ (M.C.Z. 278864-6) Nyika Plateau. 3-11.xi.48.

This and related forms were removed from thoracica (Shaw & Nodder) by Mackworth-Praed & Grant (1938, Ibis, pp. 528-533).

Breeding. Testes enlarged or slightly enlarged.

Apalis flavigularis flavigularis Shelley

Apalis flavigularis Shelley, 1893, Ibis, p. 16; "Milanji" i.e. Mlanje Plateau, Nyasaland.

- 5 ♂ ♂ (M.C.Z. 278867–71) Lichenya Plateau. S–19.viii.48.
 - ♂ ♀ (M.C.Z. 278872-3) Zomba Plateau. 7-8.ix.48.
 - ♂ (M.C.Z. 278874) Ruo R., Mlanje Mtn. 31.iii.49.

The Lichenya series are topotypes of the Yellow Bar-throated Warbler. The describing of *lynesi* Vincent from Namuli Mtn. renders trinomials necessary.

Apalis Melanocephala Lightoni Roberts

Apalis chirindensis lightoni Roberts, 1938, Ostrich, 9, p. 119: Zimbiti near Beira, Mozambique.

- ♂ (M.C.Z. 278875) Chiradzulu Mtn. 30.viii.48.
- ♂ (M.C.Z. 278876) Zomba Plateau. 9.ix.48.

In the absence of comparative material we follow Benson (1951, p. 101) in referring these birds to *lightoni*.

SYLVIETTA RUFESCENS PALLIDA Alexander

Sylviella (sic) pallida Alexander, 1899, Bull. Brit. Orn. Club, 8, p. 48; Zambezi River between Tete and Chicowa, Mozambique.

♂ (M.C.Z. 278877) Mtimbuka. 9.ii.49.

Wing 57 mm., outer primary 34 mm. We are indebted to C. W. Benson for suggesting the correct determination of this crombec, and to Major Claude Grant for checking it by comparing with material in the British Museum. Benson (1940, p. 626; 1942, p. 315) found S. whytii jacksoni along the lakeshore to the north at Nkata Bay, north of Kotakota, etc.

CAMAROPTERA BRACHYURA BORORENSIS Gunning & Roberts

Camaroptera brachyura bororensis Gunning & Roberts, 1911, Ann. Transvaal Mus., 3, p. 117: Ngamwe, Boror, Mozambique.

& (M.C.Z. 278878) Ruo R., Mlanje Mtn. 31.iii.49.

CHLOROPETA NATALENSIS NATALENSIS Smith

Chloropeta natalensis A. Smith, 1847, Ill. Zool. S. Africa, Aves, pl. exii, fig 2: "Port Natal," i.e. Durban, Natal.

♂ (M.C.Z. 278887) Nchenachena. 22.xi.48.

From its locality Benson suspects that this bird is probably something of an intermediate with massaica. Chapin feels certain that this genus should be transferred from the Muscicapidae to the Sylvidae with affinities near Calamocichla and Acrocephalus.

Breeding. Testes very small.

CISTICOLA LAIS SEMIFASCIATA Reichenow

Cisticola semifasciata Reichenow, 1905, Vög. Afr., 3, p. 544: Tandala, Ukinga Mountains, Tanganyika Territory.

♀ + 3? (M.C.Z. 278851-4) Lichenya Plateau. 8-11.viii.48.

These grass-warblers were submitted to Chapin, who says the two larger birds are $\sigma \sigma$, the two smaller ones $\varsigma \varsigma$, adding that he "has compared them with others collected at 6000 feet on Mlanje by Boulton" and finds that all are $C.\ l.\ semifasciata$ which, according to Belcher (1925, p. 808) is the only species of Cisticola occurring on Lichenya Plateau. A conclusion supported by Vincent's (1935, p. 709) collecting on Mlanje.

CISTICOLA NJOMBE MARIAE Benson

Cisticola lais mariae Benson, 1945, Bull. Brit. Orn. Club, 66, p. 16; n. n. for C. l. nyikae Benson (not of Lynes), 1941, Ostrich, 12, p. 28; Nyika Plateau, Nyasaland.

5 ♂♂, 2 ♀♀ (M.C.Z. 278839) Nyika Plateau. 30.x-12.xi.48.

Breeding. On November 10-12, testes were small, moderate, and large; ova very slightly enlarged.

CISTICOLA CHINIANA EMENDATA Vincent

Cisticola chiniana emendata Vincent, 1944, Bull. Brit. Orn. Club, 64, p. 63: Mirrote, 900 feet, Mozambique Province, Mozambique.

2 ♂♂, 2 ♀ ♀ (M.C.Z. 278846-9) Mtimbuka. 7.ii-2.iii.49. The reasons why Vincent proposed *emendata* in lieu of *mocuba* Vincent, 1933, is given in the above citation. CISTICOLA CHINIANA PROCERA Peters

Cisticola procera Peters, 1868, Journ. f. Orn., 16, p. 132: Tete, Zambezi River, Mozambique.

9 (M.C.Z. 278850) near Tete, M. 21.i.49. Shot at Kasumbadedza Village, 5 miles west of Tete.

CISTICOLA NIGRILORIS Shelley

Cisticola nigriloris Shelley,1897, Ibis, p. 536, pl. xii, fig. 2: "Kombi, Masuku" i.e. Misuku Mtns., Nyasaland.

♀ (M.C.Z. 278855) Misuku Mtns. 15.x.48.

2 ♂ ♂, 1 ♀ (M.C.Z. 278856-8) Nyika Plateau. 11-17.xi.48.

Native name. Nkcena (Misuku).

Breeding. In November, testes moderate to small; ova also small.

CISTICOLA CANTANS MÜNZNERI Reichenow

Cisticola münzneri Reichenow, 1916, Journ. f. Orn., 64, p. 163: Sanya, Mahenge, Tanganyika Territory.

♂ (M.C.Z. 278859) Chiradzulu Mtn. 30.viii.48. Bill 13 mm.; wing 51.8 mm., tail 52.6 mm.

CISTICOLA NATALENSIS KATANGA Lynes

Cisticola natalensis katanga Lynes, 1930, Ibis, Suppl. p. 443: Kambove, 4500 ft., Haut Luapula District, S.E. Belgian Congo.

9 (M.C.Z. 278860) Misuku Mtns. 11.x.48.

Native name. Mpeta (Misuku: but Benson suggests confusion with Euplectes or Coliuspasser).

MUSCICAPIDAE

Muscicapa striata striata (Pallas)

Motacilla striata Pallas, in Vroeg, 1764, Cat., Adumbr., p. 3: Holland.

9 (M.C.Z. 278879) Mtimbuka. 28.ii.49.

Alseonax adustus subadustus Shelley

Alseonax subadusta Shelley, 1897, Ibis, p. 542: Nyika Plateau, 6000 feet, Nyasaland.

Q (M.C.Z. 278880) Slopes of Nvika at 5000 feet. 19.xi.48.

♂ ♀ (M.C.Z. 278881-2) Nchenachena at 4200 feet. 22.xi.48.

Breeding. Testes large; but ova small in both Q Q.

Alseonax cinereus cinereola (Finsch & Hartlaub)

Muscicapa cinereola Finsch & Hartlaub, 1870, Vög. Ost.-Afr., 4, p. 302, pl. iv, fig. 1: Usaramo, Tanganyika Territory.

Alsconax caerulescens kikuyuensis van Someren, 1921, Bull. Brit. Orn. Club, 41, p. 102: Kyambu Forest, 5000-6000 feet, Kenya Colony.

♀ (M.C.Z. 278883) Likabula River. 1.viii.48.

Dr. Chapin writes (29.v.52) that he believes *cinereola* should take precedence over *kikuyuensis*.

DIOPTRORNIS CHOCOLATINUS NYIKENSIS (Shelley)

Muscicapa nyikensis Shelley, 1899, Bull. Brit. Orn. Club, 8, p. 35: Nyika Plateau, 6000–7000 feet, Nyasaland.

♀♀ (M.C.Z. 278884-5) Misuku Mtns. 5-11.x.48.

Reasons for using *chocolatinus* in preference to *fischeri*, will be found in Benson (1946, Ibis, p. 181).

Native name. Namasundo (Misuku).

MELAENORNIS PAMMELAINA PAMMELAINA (Stanley)

Sylvia pammelaina Stanley, in Salt, 1814, Voy. Abyssinia, App., p. 59: probably Mozambique.

♂ (M.C.Z. 278886) near Tete, M. 20.i.49. Native name. Kajuba (Nyungwe).

HYLIOTA FLAVIGASTER BARBOZAE Hartlaub

Hyliota Barbozae Hartlaub, 1883, Journ. f. Orn., 31, p. 329: Caconda, Benguela, Angola.

 \circlearrowleft (M.C.Z. 278888) Nyika Mtns, at 5000 feet. 18.xi.48. Breeding. Testes large.

Batis capensis erythrophthalma Swynnerton

Batis erythrophthalma Swynnerton, 1907, Bull. Brit. Orn. Club, 19, p. 109: Chirinda Forest, 3900 feet, Southern Rhodesia.

♂ ♀ (M.C.Z. 278889-90) Zomba Plateau. 6.ix.48.

Benson suggests that these puffback flycatchers should also be referred to B. c. dimorpha, but Peters paid particular attention to these skins. It might be added that a small sylvicoline skink and frog from Chirinda Forest, Selinda Mtn., also occur on Mlanje Plateau.

Batis capensis dimorpha (Shelley)

Pachyprora dimorpha Shelley, 1893, Ibis, p. 18: "Milanji" i.e. Mlanje Plateau, Nyasaland.

♂ (M.C.Z. 278891) Lichenya Plateau. 10.viii.48.

♀ (M.C.Z. 278892) Misuku Mtns. 5.x.48.

Benson (1949, Ann. Transvaal Mus., **21**, p. 169) records a Misuku bird as *B. e. mixta* (Shelley) and suggests that this bird should be that form.

Native name. Sansa (Misuku).

Breeding. On October 6, one ovule very large.

Batis Molitor Soror Reichenow

Batis puella soror Reichenow, 1903, Vög. Afr., 2, p. 485: Quelimane, Mozambique.

"♀" (M.C.Z. 278893) Likabula River. 1.viii.48.

"9" (M.C.Z. 278894) Chiradzulu Mtn. 30.viii.48.

" ?" (M.C.Z. 278895) near Tete, M. 13.i.49.

All three apparently mis-sexed \circlearrowleft by the African skinner. Wings 54; 53; and 53.9 mm.

PLATYSTEIRA PELTATA PELTATA Sundevall

Platystira peltata Sundevall, 1850, Oefv. K. Vet.-Akad. Förh., 7, p. 105: "Caffraria inferiore," type from Umlezi River, near Durban, Natal.

9 (M.C.Z. 278896) Chiradzulu Mtn. 30.viii.48.

& (M.C.Z. 278897) near Tete, M. 20.i.49.

Native name. Mwankanganyisa (Nyungwe).

Elminia albicauda kivuensis Grote

Elminia albicauda kivuensis Grote, 1922, Journ. f. Orn., **70**, p. 485: "Kwidschwi" i.e. Idjwi Island, Lake Kivu, Belgian Congo.

♂ ♀ (M.C.Z. 278898-9) Nchenachena. 20.xi.48.

As E. longicauda kivuensis Benson (1942, p. 309). Dr. Chapin observes (29.v.52) that Elminia, not being preoccupied by Elminius (Crustacea), remains valid and should not be replaced by Erranornis. He considers albicauda specifically distinct from longicauda, but questions the validity of kivuensis.

Breeding. Testes moderately large; ova enlarged.

TROCHOCERCUS ALBONOTATUS Sharpe Plate 2, figure 1

Trochocercus albonotatus Sharpe, 1891, Ibis, p. 121: Mt. Elgon.

♂ (M.C.Z. 278900) Lichenya Plateau. 8.viii.48.

3 (M.C.Z. 278901) Zomba Plateau. 8.ix.48.

♀ (M.C.Z. 278902) Misuku Mtns. 1.x.48.

2 ♂♂, 1 ♀ (M.C.Z. 278903; 279082–3) Nyika Plateau. 11–18.xi.48.

Native name. Mwankilafuka (Misuku).

Breeding. In November testes large; on the 18th two nestlings (pl. 2, fig. 1) were brought to camp by one of the carriers who had come to take our loads down the Nyika. Had it been possible I would have had them returned; they are now M.C.Z. 279082-3.

TERPSIPHONE VIRIDIS PLUMBEICEPS Reichenow

Terpsiphone plumbeiceps Reichenow, in Werther, 1898, Mittl. Hochl. Deutsch-Ost-Afrika, p. 275: Milange, Angola.

o (M.C.Z. 278904) near Tete, M. 11.i.49. Native name. Zuze (Nyungwe).

PSEUDOALCIPPE STIERLINGI STICTIGULA (Shelley)

Alcippe stictigula Shelley, 1903, Bull. Brit. Orn. Club, 13, p. 61: Mwenembe,

7500 feet, Nyika Plateau, Nyasaland.

♂ ♂ (M.C.Z. 278905–6) Nyika Plateau. 3–9.xi.48.

Nesting. Testes large. See Benson (1951, p. 92) regarding nest and eggs collected 3.xi.48.

MOTACILLIDAE

Motacilla aguimp vidua Sundevall

Motacilla vidua Sundevall, 1850, Oefv. K. Vet.-Akad. Förh., 7, p. 128: "Syene," i.e. Assouan, Upper Egypt.

♂ (M.C.Z. 278907) near Tete, M. 22.i.49.

Native name. Zambezi (Nyungwe, who considered M. f. luteus was its mate).

Habits. "The lorry, which has been parked to one side of the front lawn for five days, had not been there long when I disturbed a Pied Wagtail on the bonnet. During succeeding days I realized that I rarely approached or passed the vehicle without a wagtail flying off the hood. Today I counted the white droppings that disfigure the gleaming green paint and found they number about fifty. I remarked

on this to our host and he replied that he thought it was well known that wagtails like to perch on the bonnets of cars, presumably to see their own reflections.

"Pointing to a much white-washed section of the veranda rail, Mr. Haskard went on to say that it was the favorite perch of a wagtail, one of the pair that haunt his house and garden. From this stance the bird flies against the third pane, never any other, of the lounge window, taps the glass with its beak and then returns to the rail. One day the wagtail repeated this performance about twenty times. Thinking the bird possibly wished to come in, Haskard rose from his desk and opened the casement, whereupon the wagtail flew away. Haskard decided that from where it sat on the rail the bird could see its own reflection in the third pane only and possibly mistook it for a rival." (Chiradzulu Mtn., 30.viii.48).

MOTACILLA FLAVUS LUTEUS (Gmelin)

Parus luteus S. G. Gmelin, 1774, Reise d. Russland, 3, p. 101, pl. xx, fg. 1: Astrakan, Caspian Sea, U.S.S.R.

Motacilla campestris Pallas, 1776, Reise Versch. Prov. Russ. Reichs, 3, Anhang, p. 696; S. Russia and Siberia.

♂♂ (M.C.Z. 278908–9) near Tete, M. 22.i.49. Native name. Zambezi (Nyungwe, but not specific).

We are indebted to Dr. Chapin (29.v.52) for pointing out that *luteus* has priority over *campestris*.

Anthus Richardi Lacuum Meinertzhagen

Anthus richardi lacuum Meinertzhagen, 1920, Bull. Brit. Orn. Club, 41, p. 22: Lake Naivasha, Kenya Colony.

♂ (M.C.Z. 278910) near Tete, M. 22.i.49. Native name. Tanganyika (Nyungwe).

This identification by Peters was subsequently checked by the junior author who found the pale Tete bird apparently identical with a Q (M.C.Z. 134105) from Ngong, Kenya Colony; and a pair (M.C.Z. 134109-10) I collected at Lumbo, Mozambique, referred to raaltenii by Friedmann and Loveridge (1937, Bull. Mus. Comp. Zool., 81, p. 297). Chapin (29.v.52) writes that lacuum allegedly ranges south to the mouth of the Zambezi.

Anthus Richardi Lichenya Vincent

Anthus richardi lichenya Vincent, 1933, Bull. Brit. Orn. Club, **53**, p. 131: Mlanje Mtn. at 6000 feet, Nyasaland.

♂ ♀ (M.C.Z. 278914-5) Lichenya Plateau. 10.viii.48.

♀ (M.C.Z. 278916) Nyika Plateau. 2.xi.48.

The Lichenya birds are topotypic. Benson (1940, p. 587) considers this name applicable to all Nyasaland richardi from whatever altitude, while A. r. lacuum are extralimital to the north and A. r. raalteni extralimital to the south.

Breeding. See Benson (1951, p. 92) regarding nest and eggs collected on 3.xi.48.

Anthus Richardi? Raalteni Layard

Anthus raalteni Layard, 1867, Birds S. Afr., p. 123: Swellendam, South Africa.

್ ೆ (M.C.Z. 278911–2) Misuku Mtns. 11–15.x.48. imm. ♀ (M.C.Z. 278913) Nehisi Mtn. 27.xi.48.

The immature Nchisi bird closely resembles an immature Pretoria bird in the collection, but all three differ from Mlanje and Nyika *lichenya* in having the light portion of the outer tail feathers is abelline rather than whitish.

Native name. Nichikula (Misuku); nchola (Chewa).

Breeding. On October 15, gonads large.

LANHDAE

Lanius collaris humeralis Stanley

Lanius humeralis Stanley, in Salt, 1814, Voy. Abyssinia, App., p. 51: Chelicut, Ethiopa.

 \circ (M.C.Z. 278917) Nyika Plateau. 28.x.48. Breeding. Held a large yolked ovum.

Lanius collurio Linné

Lanius Collurio Linné, 1758, Syst. Nat., ed. 10, 1, p. 94: Europe = Sweden (restricted).

♂ (M.C.Z. 278918) Ruo R., Mlanje Mtn. 1.iv.49.

The April European Red-backed Shrike is in fresh plumage. *Native name*. *Nyambula* (Nyungwe, but not generic).

Laniarius fülleborni (Reichenow)

- Dryoscopus fülleborni Reichenow, 1900, Orn. Monatsb., 8, p. 39; "Usafua," i.e. Usafwa, north of Lake Nyasa, Tanganyika Territory.
 - ♀ (M.C.Z. 278922) Misuku Mtns. 29.ix.48.
 - ? (M.C.Z. 278923) Nyika Plateau. 13.xi.48.

Native name. Namankoto (Misuku).

Laniarius ferrugineus mossambicus (Reichenow)

- Dryoscopus major mossambicus Reichenow, 1880, Journ. f. Orn., 23, p. 141: Mozambique.
 - ♂ ♀ (M.C.Z. 278924-5) near Tete, M. 20.i.49. Native name. Nyambula (Nyungwe, but not generic).

Dryoscopus cubla hamatus Hartlaub

- Dryoscopus hamatus Hartlaub, 1863, Proc. Zool. Soc. London, p. 106: "Kazeh," i.e. Tabora, Unyamwezi, Tanganyika Territory.
 - 2 ♂♂, 1 ♀, nestling (M.C.Z. 278926-9) near Tete, M. 7-20.i.49. Native name. Nyambula (Nyungwe, but not generic).

 Parasites. A gray tick was taken from the throat of one shrike.

Tchagra australis congener (Reichenow)

- Pomatorhynchus australis congener Reichenow, 1902, Journ. f. Orn., 50, p. 258:
 Type in Berlin Mus. from Neu-Helgoland, Songea District, Tanganyika Territory.
 - ♂ (M.C.Z. 278930) Misuku Mtns. ix.48.
 - ♂ (M.C.Z. 278931) near Tete, M. 20.i.49.

Native name. Umangwa (Misuku).

Wings 71 and 73 mm.; tails 83.2 and 81.7 mm. Chapin (29.v.52) points out that *Tchagra*, not *Tschagra*, is the correct spelling of this genus.

Chlorophoneus sulfureopectus similis (Smith)

- Melaconotus similis A. Smith, 1836, Rep. Exp. Centr. Afr., p. 44: "Country beyond Kurrichaine," i.e. Rustenburg District, Transvaal.
 - ∂ (M.C.Z. 278932) near Tete, M. 17.i.49. Native name. Boto (Nyungwe).

CHLOROPHONEUS NIGRIFRONS MANNINGI (Shelley)

Malaconotus manningi Shelley, 1899, Bull. Brit. Orn. Club, 8, p. 35; (No locality given). Nyasa-Tanganyika Plateau.

o³ (M.C.Z. 278933) Ruo R., Mlanje Mtn. 31.iii.49. See Vincent (1935, pp. 753-756) for discussion on why he prefers to

see Vincent (1935, pp. 753–756) for discussion on why he prefer call this Orange-breasted Bush-Shrike C. abbotti manningi.

PRIONOPIDAE

PRIONOPS PLUMATA POLIOCEPHALA (Stanley)

Lanius poliocephalus Stanley, in Salt, 1814, Voy. Abyssinia, App., p. 50: No locality; Mozambique apud Neumann.

2 ♂♂, 2 ♀ ♀ (M.C.Z. 278934-7) near Tete, M. 13-27.i.49. *Native name. Nyemi* (Nyungwe).

STURNIDAE

CINNYRICINCLUS LEUCOGASTER VERREAUXI (Bocage)

Pholidauges verreauxi Bocage, in Finsch & Hartlaub, 1870, Vög. Ost-Afr., p. 867: Caconda, Angola.

Lamprocolius Chalybaeus Sycobius Hartlaub

Lamprocolius sycobius Hartlaub, 1859, Journ. f. Orn., 7, p. 19: Tete, Mozambique.

2 & 3, 1 & (M.C.Z. 278940–2) near Tete, M. 12–17.i.49. Native name. Mbuluwe (Nyungwe).

Lamprotornis mevesii mevesii (Wahlberg)

Juida mevesii Wahlberg, 1857, Journ. f. Orn., 5, p. 1: "Doughe," i.e. Okavango River, Southwest Africa.

♀ (M.C.Z. 278943) near Tete, M. 13.i.49.

Vincent (1936, p. 55) did not meet with this Long-tailed Glossy-Starling anywhere in Tete Province, neither did Benson (1942, p. 325) in West Nyasa.

Native name. Mbuluwe (Nyungwe, but not generic).

Onychognathus Walleri Nyasae (Shelley)

Amydrus nyasae Shelley, 1898, Ibis, p. 557: Nyasaland.

 $\,\circ\,$ (M.C.Z. 278944) Nyika Plateau. 5.xi.48. Breeding. Ova small.

Onychognathus tenuirostris raymondi Meinertzhagen

Onychognathus tenuirostris raymondi Meinertzhagen, 1937, Bull. Brit. Orn. Club, **57**, p. 68; Mt. Kenya, 15,000 feet, Kenya Colony.

& (M.C.Z. 278945) Nyika Plateau. 1.xi.48.

Chapin informs the junior author that it is generally agreed that raymondi and theresae are not separable. Unless some reviser has given preference to theresae so that Art. 28 of the International Rules is invoked, the name raymondi has paragraph preference and should be employed. Possibly this specimen constitutes the first Nyasaland record for the Slender-billed Chestnut-wing.

NECTARINIIDAE

NECTARINIA FAMOSA CUPREONITENS Shelley

Nectarinia cupreonitens Shelley, 1876, Monogr. Nect., p. 17, pl. vi: "Abyssinia," etc. = Ethiopia (restricted).

4 ♂ ♂ (M.C.Z. 278946-9) Nvika Plateau. 10-16.xi.48.

According to Sclater (1930, p. 682) this bird should be the typical form from S. Africa, but Benson (1942, p. 325) refers a Nyika specimen to f. aencigularis of Kenya Colony, now regarded by Grant & Praed (1947, Bull. Brit. Orn. Club, p. 83) as synonymous with eupreonitens.

Breeding. Testes large in two birds, moderate in the other two. One was collected with a nest and eggs but there is some doubt as to whether the nest might not have been that of a salvadorii.

Nectarinia johnstoni salvadorii Shelley

Nectarinia salvadorii Shelley, 1903, Bull. Brit. Orn. Club, 13, p. 61: Kachere, 8400 feet, Nyika Plateau, Nyasaland.

4 ♂♂, 4 ♀♀ (M.C.Z. 278950-7) Nyika Plateau. 29.x-16.xi.48.

Breeding. Two of these pairs are the birds whose nests and eggs were referred to by Benson (1951, p. 109) as probably the first of this race ever to be taken. Another nest, found on October 30, contained two hatchlings, now preserved in alcohol. Nesting at 7000 ft. in late October and early November.

NECTARINIA KILIMENSIS ARTURI Sclater

Nectarinia arturi P. L. Sclater, 1906, Bull. Brit. Orn. Club, 19, p. 30: Wolverhampton, Melsetter District, Southern Rhodesia.

♂ (M.C.Z. 278958) Nchenachena. 20.xi.48.

Breeding. Testes very small; elongated tail feathers only just projecting beyond the rest.

CINNYRIS BIFASCIATUS MICRORHYNCHUS Shelley

Cinnyris microrhyncha Shelley, 1876, Monogr. Nect., p. 219, pl. 1xvii: "Zanzibar District." Type in Brit. Mus. from Dar es Salaam, Tanganyika Territory.

3 ♂ ♂ (M.C.Z. 278959-61) near Tete, M. 7-15.i.49.

Native name. Songosongo (Nyungwe for all sunbirds as well as for Melittophagus p. meridionalis, which see).

CINNYRIS TALATALA TALATALA Smith

Cinnyris talatala A. Smith, 1836, Rep. Exp. Cent. Afr., p. 53: between Orange River and Kurrichaine, South Africa.

3 ♂ ♂, 3 ♀ ♀ (M.C.Z. 278962-7) near Tete, M. 15-17.i.49.

Native name. As for C, b, microrhynchus.

Dr. Chapin informs us (14.iv.52) that the type of *C. leucogaster* Vieillot was found by Hellmayr to be identical with *C. v. venustus* so that *talatala*, which appears specifically distinct from *venustus*, should be used for Tete birds. Trinomials are necessary as typical southern *talatala* are larger than the western and northern forms which are separable as *C. t. anderssoni* (Strickland, 1852, Contrib. Ornith., p. 153), from Okavango River.

CINNYRIS VENUSTUS FALKENSTEINI Fischer & Reichenow

Cinnyris Falkensteini Fischer & Reichenow, 1884, Journ. f. Orn., 32, p. 56: Lake Naivasha, Kenya Colony.

♂ ♀ (M.C.Z. 278968-9) Zomba Plateau. 4.ix.48.

♂ ♂ (M.C.Z. 278970-1) Misuku Mtns. 14.x.48.

♀ (M.C.Z. 278973) Nchenachena. 20.xi.48.

o (M.C.Z. 278972) Ruo R., Mlanje Mtn. 8.iv.49.

Breeding. In mid-November bird, ova very small.

CINNYRIS CHALYBEUS BRACTIATUS Vincent

Cinnyris chalybeus bractiatus Vincent, 1933, Bull. Brit. Orn. Club, **53**, p. 146: Fort Chiquaqua, Mashonaland, Southern Rhodesia.

♂ (M.C.Z. 278974) Chiradzulu Mtn. 30.viii.48.

Except for a slight yellowish wash on the posterior underparts, this bird agrees most nearly with namwera Vincent, 1933, but Grant & Praed (1947, Bull. Brit. Orn. Club, 67, pp. 84-85) consider both namwera and zonarius synonymous with bractiatus which has paragraph preference. Its bill is 22.2 mm.; wing 59.75 mm.

CINNYRIS MEDIOCRIS FÜLLEBORNI Reichenow

Cinnyris fülleborni Reichenow, 1899, Orn. Monatsb., 7, p. 7: Kalinga, Iringa District, Tanganyika Territory.

2 ♂ ♂, 2 ♀ ♀ (M.C.Z. 278975-8) Lichenya Plateau. 8-11.viii.48.

2 ♂♂ (M.C.Z. 278979–80) Zomba Plateau. 8–10.ix.48.

2 ♂♂, 2 ♀♀ (M.C.Z. 278981-4) Misuku Mtns. 24.ix.-14.x.48.

Native name. Makilembwe (Misuku).

Breeding. On August 11, a very large ovum in a Mlanje bird.

·Chalcomitra senegalensis gutturalis (Linné)

Certhia gutturalis Linné, 1766, Syst. Nat., ed. 12, 1, p. 186: "Brazil." South Africa (fide Shaw).

♂ (M.C.Z. 278985) Nchenachena. 22.xi.48.

juv. ♂ (M.C.Z. 278986) Chitala River. 10,xii.48.

4 ♂ ♂ (M.C.Z. 278987-90) near Tete, M. 17-26.i.49.

Sclater (1930, p. 701) remarks that birds of "the Zambesi Valley are intermediates between gutturalis and inacstimata;" while Vincent (1936, p. 69) refers his Tete birds to inacstimata. We follow Grant & Praed (1948, Bull. Brit. Orn. Club, 68, p. 151) in calling them gutturalis.

Native name. Songosongo (Nyungwe, for all sunbirds).

Breeding. In November, testes large, but three of the Tete birds are only beginning to assume the black plumage in January.

Cyanomitra olivacea alfredi Vincent

Cyanomitra olivacea alfredi Vincent, 1934, Ibis, p. 90: Namuli Mtn., 4600 feet, Quelimane Province, Mozambique.

♂ (M.C.Z. 278991) Chiradzulu Mtn. 28.viii.48.

♀ (M.C.Z. 278992) Cholo Mountain. 12.iii.49.

♀♀ (M.C.Z. 278993-4) Ruo R., Mlanje Mtn. 1.iv.49.

Anthreptes collaris zambesiana (Shelley)

Anthodiaeta zambesiana Shelley, 1880, Monogr. Nect., p. 343, pl. exi, fig. 3: "Eastern Africa" etc. Type in Brit. Mus. from Shupanga, Zambezi River, Mozambique.

♂ (M.C.Z. 278995) Chiradzulu Mtn. 30.viii.48.

♂ (M.C.Z. 278996) Mtimbuka. 1.iii.49.

Native name. Kadiamaluwa (Yao).

Anthreptes anchietae Bocage

Nectarinia anchietae Bocage, 1878, Jorn. Sci. Lisboa, 6, p. 208: Caconda, Angola.

 $\,\circ\,$ (M.C.Z. 278997) Nehenachena. 22.xi.48. Breeding. Ova numerous and small.

ZOSTEROPIDAE

Zosterops virens stierlingi Reichenow

Zosterops stierlingi Reichenow, 1899, Journ. f. Orn., 47, p. 418: Iringa, Uhehe, Tanganyika Territory.

♀ (M.C.Z. 278998) Misuku Mtns. 15.x.48.

♂ ♀ (M.C.Z. 278999-9000) Nyika Plateau. 9.xi.48.

These birds have definitely darker backs than the Mlanje birds listed below.

Native name. Nasiru (Misuku).

Breeding. In November, testes large, and ova almost ready for laying.

Zosterops senegalensis? Niassae Reichenow Zosterops niassae Reichenow, 1904, Journ. f. Orn. **52**, p. 133: Songea, Tangan-yika Territory.

2 ♂♂, 2 ♀♀ (M.C.Z. 279001-4) Ruo R., Mlanje Mtn. 8.iv.49. These birds have lighter backs than those obtained in northern Nyasaland. Benson (1942, p. 325) found Z. s. anderssoni nesting at Ncheu.

PLOCEIDAE

PLOCEPASSER MAHALI PECTORALIS (Peters)

Philagrus pectoralis Peters, 1868, Journ. f. Orn., 16, p. 133: Inhambane, Mozambique.

2 & A, 1 \, \text{(M.C.Z. 279005-7) near Tete, M. 7-14.i.49.} Native name. Sochina (Nyungwe).

Passer griseus mosambicus van Someren

Passer griscus mosambicus van Someren, 1921, Bull. Brit. Orn. Club, 41, p. 114: Lumbo, Mozambique.

♂ (M.C.Z. 279009) Mtimbuka. 11.ii.49.

♂ (M.C.Z. 279008) near Tete, M. 14.i.49.

Vincent (1936, p. 75) when assigning birds from Tete and Fort Johnston to *mosambiens*, says that on account of the extensive individual and seasonal variation he has been forced to follow the distribution given by Sclater (1930, p. 724).

Native names. Jolo (Nyungwe); ngonamakungwa (Yao).

Ploceus stuhlmanni nyikae Benson

Othuphantes stuhlmanni nyikae Benson, 1938, Bull. Brit. Orn. Club, **58**, p. 112: Nyika Plateau, Nyasaland.

 \mathcal{Z} (M.C.Z. 279010) Nyika Plateau. 28.x.48. Breeding. Testes moderately large.

PLOCEUS VELATUS TAHATALI Smith

- Ploceus tahatali A. Smith, 1836, Rep. Exped. Cent. Afr., p. 50; Between Orange River and the Tropic (probably Marico River).
 - 3 (M.C.Z. 279011) Chitala River. 18.xii.48.
 - (M.C.Z. 279012) Mtimbuka. 2.iii.49.
 - 7 (M.C.Z. 279013) near Tete, M. S.i.49.

Native name. Senje (Nyungwe).

Ploceus intermedius cabanish (Peters)

Hyphantornis cabanisii Peters, 1838, Journ. f. Orn., 13, p. 133; Inhambane, Mozambique.

- 3 3 (M.C.Z. 279014-5) Mtimbuka, Lake Nyasa. 1.iii.49.
- F = (M.C.Z. 279016-7) On N. bank opp. Tete, M. 4.i.49.

Breeding. Tete birds were building in the baobab beside ferry; testes large.

Ploceus ocularius suahelicus Neumann

- Ploceus ocularius suahelicus Neumann, 1995, Johrn. f. Orn. 53, p. 339; Lewa, Usambara Mtns., Tanganyika Territory.
 - (M.C.Z. 279018) Mnema, L. Nyasa. 16.xii.48.
 - 3 (M.C.Z. 279019) Mtimbuka, L. Nyasa. 1.iii.49.

Native name. Njesi (Yao).

Amblyospiza albifrons albifrons (Vigors)

Pyrrhula albifrons Vigors, 1831, Proc. Zool. Soc. London, p. 92; Algon Bay, Cape Province.

? 9 (M.C.Z. 279023) Chiradzulu Mtn. 28.viii.48.

Anaplectes rubriceps (Sundevall)

Ploceus (Hyphantornis) rubriceps Sundevall, 1850, Oefv. K. Vet.-Akad. Förh., 7, p. 97; "Caffraria Superiore". Type from Mohap ani Berg, Bechuanaland.

2 & A, 1 \, Q (M.C.Z. 279020–2) near Tete, M. 7–15.i.49. Natire name. Sulisuli (Nyungwe).

Euplectes? Orix Sundevalli Bonaparte

Euplectes sundevalli Bonaparte, 1850, Consp. Gen. Av., 1, p. 446; "Caffrer," i.e. Eastern Transvaal.

4 ♀♀ (M.C.Z. 279024-7) near Tete, M. 8-14.i.49.

In the absence of $\mathcal{O}\mathcal{O}$, Benson suggests that these birds are most likely referable to *sundevalli*, rather than to "? *nigroventris*" as we had them for they would have constituted an even more southerly record for *nigroventris* than those from Mocuba listed by Vincent (1936, p. 87). On the other hand E. o. sundevalli occurs at Tete (cf. Benson, 1949, Bull. Brit. Orn. Club, **69**, p. 112).

Euplectes hordeaceus hordeaceus (Linné)

Loxia hordeacea Linné, 1758, Syst. Nat., ed. 10, 1, p. 173; "in Indiis," i.e. Senegal (fide Gyldenstolpe).

♂ ♂ (M.C.Z. 279028-9) Mtimbuka. 18-29.ii.49.

♂ (M.C.Z. 279030-1) Ruo R., Mlanje Mtn. 31.iii.49.

Delacour & Edmond Blanc (1933, Rev. Fr. Orn., N. S., 3, pp. 539, 549) point out that *sylvatica* Neumann, from Jaunde, Cameroon, with which the senior author identified these skins, is inseparable from *h. hordcaecus* to which Messrs. Chapin and Benson would have us refer them.

Native name, Kanjesa (Yao).

Coliuspasser albonotatus albonotatus (Cassin)

Vidua albonotata Cassin, 1848, Proc. Acad. Nat. Sci. Philadelphia, 4, p. 65: Port Natal, i.e. Durban, Natal.

♂ (M.C.Z. 279032) Mtimbuka. 18.ii.49.

Native name, Mkanji (Yao).

Breeding. In breeding plumage except that the long tail feathers are not grown.

Coliuspasser hartlaubi psammacromius (Reichenow)

Penthetria psammacromia Reichenow, 1990, Orn. Monatsb., 8, p. 39; Tandala, Ukinga Mtns., Tanganyika Territory.

4 ♂ ♂, 6 ♀ ♀ (M.C.Z. 279033-42) Nyika Platean. 28.x-17.xi.48. Breeding. Three ♀ ♀ noted as breeding, another shot from a flock of thirty ♀ ♀ which were following one of the handsome ♂ ♂, all of which are in full breeding plumage with testes enlarged. See Benson (1951, p. 112) regarding the nest and eggs collected 17.xi.48.

Coliuspasser ardens ardens (Boddaert)

Fringilla ardens Boddaert, 1783, Tabl. Pl. enlum, p. 39; Cape of Good Hope, ex. Pl. Enlum, 647.

♂ (M.C.Z. 279043) Cholo Mtn. 23.iii.49.

♂ (M.C.Z. 279044) Ruo R., Mlanje Mtn. 1.iv.49.

Breeding. Full breeding plumage with red collars.

Lonchura cucullatus scutatus Heuglin

Spermestes scutatus Heuglin, 1863, Journ. f. Orn., 11, p. 18; Dombea, Ethiopia.

♀ (M.C.Z. 279045) Ruo R., Mlanje Mtn. 1.iv.49.

The generic name has been changed from *Spermestes* (as the senior author had it) to *Lonchura* at the suggestion of Dr. Chapin (29.v.52) who is convinced that Delacour (1943, Zoologica, **23**, p. 82) is correct.

Cryptospiza reichenovii australis Shelley

Cryptospiza australis Shelley, 1896, Ibis, p. 184; Shire Highlands; type in Brit. Mus. from Chiradzulu Mtn., Nyasaland.

♀ (M.C.Z. 279046) Chiradzulu Mtn. 27.viii.48.

2 3 3, 1 9 (M.C.Z. 279047-9) Zomba Plateau. 4–10.
ix.48.

♀ (M.C.Z. 279050) Nyika Plateau. 3.xi.48.

Benson (1936, Bull. B.O.C., **56**, p. 100), when clarifying confusing Nyasaland records, gives reasons why *australis* must be regarded as a race of *reichenovii* and not *salradorii*, and refers *ocularis* Sharpe, 1902, and *r. sanguinoleuta* Vincent, 1933, to the synonymy.

Mandingoa nitidula nitidula (Hartlaub)

Estrelda nitidula Hartlaub, in Gurney, 1865, Ibis, p. 269; Natal.

♀ (M.C.Z. 279051) Ruo R., Mlanje Mtn. 8.iv.49.

Lagnosticta rubricata haematocephala Neumann Lagnosticta rubricata haematocephala Neumann, 1907, Orn. Monatsb., 15, p. 168; Songea, Tanganyika Territory.

5 (M.C.Z. 279052) Vipya Platean. 17.ix.48. Native names. Nkwehlela (Ngoni); tunduru (Timbuka).

LAGNOSTICTA SENEGALA RENDALLI Hartert

Lagnosticta senegala rendalli Hartert, 1898, Nov. Zool., 5, p. 72; Upper Shire River, Nyasaland.

♂ (M.C.Z. 279053) Mtimbuka. 19.ii.49.
 ♂ (M.C.Z. 279054) near Tete, M. 21.i.49.

Mtimbuka is about 14 miles northwest of the Upper Shire, but Benson points out that "Upper Shire" was formerly used as the name of a district of which the headquarters—was Liwonde.

Native names. Osisidongo (Nyungwe); pwiti (Yao).

Estrilda astrild cavendishi Sharpe

Estrilda cavendishi Sharpe, 1900, Ibis, p. 110; Mapicuti, Cheringoma District, Mozambique.

5 & ? (M.C.Z. 279055-6) Misuku Mtns. 24.ix.48. The label of one bird has been detached and lost in transit. *Native name. Kaiyaga* (Misuku).

Uraeginthus angolensis niassensis Reichenow Uraeginthus bengalus var. niassensis Reichenow, 1911, Mitt. Zool. Mus. Berlin, 5, p. 228; Songea, Tanganyika Territory.

Hypochera amauropteryx Sharpe

Hypochera anauropteryx Sharpe, 1890, Cat. Bds. Brit. Mus., 13, p. 309; Rustenberg, Transvaal.

2 ♂♂, 2 ♀♀ (M.C.Z. 279059-62) near Tete, M. 11–19.i.49. Native names. Nanchecheche (♂) and kaujiri (♀) (Nyungwe).

Hypochera funerea funerea (Tarragon) Fringillo funerea de Tarragon, 1847, Revue Zool, Paris, p. 189; Natal.

3 (M.C.Z. 279063) Ruo R., Mlanje Mtn. 2.iv.4*.

VIDUA MACROURA (Pallas)

Fringilla macroura Pallas, in Vroeg, 1764, Cat., Adum'r. No. 144, p. 3; "East Indies," i.e. Angola (fide Edwards & Brisson).

♂ (M.C.Z. 279065-6) Mtimbuka. 28.ii-2.iii.49.

♀ (M.C.Z. 279067) Ruo R., Mlanje Mta. 1.iv.49.

♂ (M.C.Z. 279064) near Teto, M. 24.i.49.

Native names. Katzuzeuchira (Nyungwe); kwichi (Yao). Breeding. All in breeding plumage.

Steganura paradisea paradisea (Linné)

Emberiza paradisca Linné, 1758, Syst. Nat., ed. 10, 1, p. 178; Africa = Angola (restricted).

 $3 \text{ or } \text{or } (M.C.Z.\ 279068-70) \text{ near Tete, } M. \quad 19-22.i.49.$ Native name. Zuzi (Nyungwe).

FRINGILLIDAE

Serinus sulphuratus shelleyi Neumann

Serinus shelleyi Neumann, 1903, Orn. Monatsb., 11, p. 184: Kafuro, Bukoba Province, Tanganyika Territory.

♀ (M.C.Z. 279071) Vipva Plateau. 17.ix.48.

Serious shelleyi is retained on the advice of Messrs. Chapin and Benson who disagree with Grant & Praed (1947, Bull. Brit. Orn. Club, 68, p. 62) in regarding it as synonymous with the bigger billed sharpii Neumann, 1900, of Kilimanjare and the Kenya Highlands.

Serinus canicollis sassii Neumann

Serinus flavivertex sassii Neumann, 1922, Orn. Monatsb., **30**, p. 13; Tse¹tingogo Forest, Lake Kivu.

♂ (M.C.Z. 279072) Misuku Mtns. 15.x.48.

3 ♂ ♂, 2 ♀♀ (M.C.Z. 279073–7) Nyika Plateau. 28.x.-13.xi.48.

In regarding this form as a race of *canicollis* we follow Benson (1951, p. 113).

Native name. Swiswi (Misuku).

Breeding. October 15–30, testes large; two Q were sitting. See Benson (1951, p. 113) regarding the three nests and eggs collected.

Linurgus olivaceus rungwensis Bangs & Loveridge

Linurgus kilimensis rungwensis Bangs & Loveridge, 1931, Proc. New Eng. Zool, Club, 12, p. 96; Nkuka Forest, Rungwe Mtn., Tanganyika Territory. ♂ (M.C.Z. 279078) Nyika Plateau. 12.xi.48.

Benson informs us that Grant & Praed no longer regard *kilimensis* as specifically distinct from *olivaceus* Fraser of Fernando Po.

Breeding. Testes large.

EMBERIZIDAE

Emberiza flaviventris flaviventris Stephens

Emberiza flaviventris Stephens, in Shaw, 1815, Gen. Zool., 9, pt. 2, p. 374: "Cape of Good Hope," etc., i.e. Cape Province (restricted).

♂ (M.C.Z. 279079) near Tete, M. 12.i.40.

BIBLIOGRAPHY

only of those works referred to in the text in abbreviated form.

Belcher, C. F.

- 1925. "Birds on the Luchenya Plateau, Mlanje, Nyasaland." 1bis, pp. 797-814.
- 1930. "The Birds of Nyasaland." (London), pp. xii \pm 356; map.

Benson, C. W.

- 1939. "A new race of Forest Warbler from Nyasaland." Bull. Brit. Orn. Club, 59, pp. 108-113.
- 1940. "Further Notes on Nyasaland Birds (with particular reference to those of the Northern Province)." Ibis, pp. 257–298, 387–433, 583–629; pls. i–iii & x.
- 1942. "Additional Notes on Nyasaland Birds." Ibis, pp. 197–224, 299–337.
- 1951. "Breeding and other Notes from Nyasaland and the Lundazi District of Northern Rhodesia." Bull. Mus. Comp. Zool., 106, pp. 69-114.

Chapin, J. P.

- 1932. "The Birds of the Belgian Congo. Part I." Bull, Am. Mus. Nat. Hist., 65, pp. x + 756; figs. 1-208; pls. i-x; map.
- 1939. loc. cit. "Part II." **75**, pp. viii + 632; figs. 1-28; pls. i-xxi.

Peters, J. L.

- 1931. "Check-List of Birds of the World." 1, pp. xx + 345. (Cambridge, Mass.)
- 1934. loc. cit. **2**, pp. xviii + 401.
- 1937. loc. cit. 3, pp. xiv + 311.
- 1940. loc. cit. **4**. pp. xii + 291.
- 1945. loc. cit. 5, pp. xii + 306.
- 1948. loc. cit. 6, pp. xii + 259.

SCLATER, W. L.

- 1924. "Systema Avium Aethiopicarum. A Systematic List of the Birds of the Ethiopian Region. Part I." (London), pp. 1–304.
- 1930. loc. cit. "Part II." pp. 305-922 + xi.

VINCENT, JACK

- 1933. "The Birds of Northern Portuguese East Africa. Comprising a List of, and Observations on, the Collections made during the British Museum Expedition of 1931–32. Part I." Ibis, pp. 611–652; pls. xx-xxiii; map.
- 1934. loc. cit. "Parts II to V." pp. 126-160, 305-340, 495-527, 757-799; pls. iv-vi & xiv-xv.
- 1935. loc. cit. "Parts VI to IX." pp. 1–37, 355–397, 485–529, 707–762.
- 1936. loc. cit. "Part X." pp. 48-125.